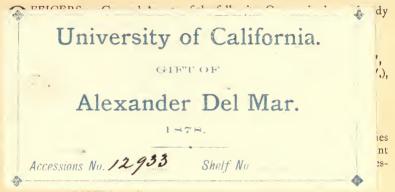




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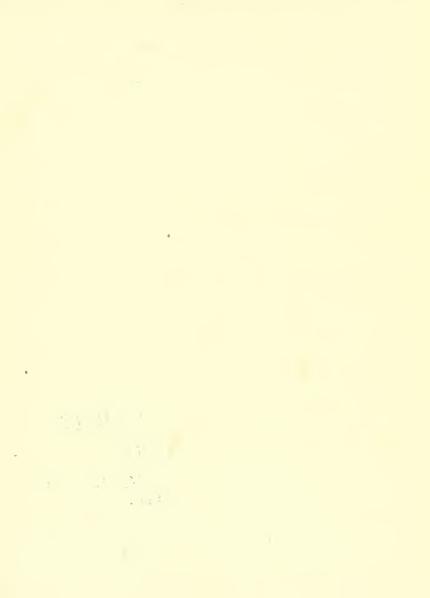
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THE

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In the Clerk's Office of the United States District Court for the District of New Jersey.

12933

WYNKOOP & HALLENBECK,
113 FULTON STREET,
NEW YORK.



"Among the honorable workers in the civilized world, to whom the public as well as the assured will die indebted, we give faithful and successful Life Assurance Agents a high place."

ELIZUR WRIGHT.

"That some of the tears of the widow may be wiped away, and some of the cries of the fatherless be hushed."









PREFATORY NOTE.

VERY science has its corresponding art. Life Assurance is a Science; but it is also an Art. The theory is one thing; the practice is quite another. And the latter is not a matter of less importance than the former.

As a consequence, active and intelligent Agents are essential to the prosperity of a Life Company. It is not enough to establish agencies. Those filling them are to be instructed

and stimulated into full-grown and efficient men.

Every successful and rising Assurance office has devoted a considerable part of its attention to the matter of agencies. Where this has been deemed of trifling moment, little has been accomplished.

A Life Agency may fairly be called a *Profession*. And hence an agent should have, besides a general education, a sort of *professional* education,—which, by common consent is demanded in the practice of law, medicine and the like. Other things being equal, the more familiar one is with his profession, the more thoroughly furnished is he for his work.

The public is fast becoming enlightened on the subject of Life Assurance. Inquisitive minds

5

now push their investigations beyond the advertisements, circulars, &c., of the Life Companies, and ask for other information. Hence, a higher grade of intelligence and capacity on the part of agents is requisite;—just as the general education of the masses necessitates a more thorough education of the teachers. They must broaden the horizon of their knowledge, and be prepared to speak intelligently of what they recommend. In a word, they must show that they are masters of their profession. For how can a novice instruct? And how can an agent bring to bear a controlling influence upon a man who is competent to be his teacher in the very things belonging to his occupation?

PREFACE.

A work like that here submitted was therefore needed. Its aim is one and simple;—namely, to help Life Assurance Agents. It puts

into their hands just the facts they want to possess; gives them something to think about; furnishes a multitude of hints and suggestions; magnifies their work and places it on a higher level; raises their courage; kindles enthusiasm; and imparts force, readiness, and effectiveness in their high and beneficent calling.

The author takes occa ion to acknowledge his indebtedness to the Hon. Wm. Barnes, Insurance Commissioner for the State of New York, Mr. J. G. Batterson, President of the Travelers' Insurance Company, Hartford, Conn., Mr. Lewis C. Lawton, Assistant Actuary of the Mutual Life Insurance of New York, and other gentlemen, whose statistical and other publications, and whose kind assistance, have given increased value to this work.



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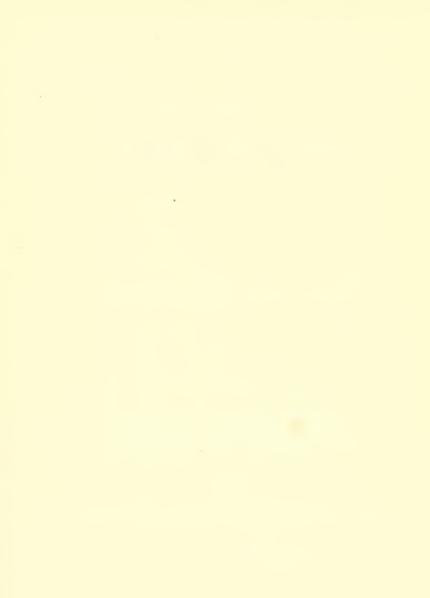
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Agent's Manual.







THE SIGNIFICATION OF TERMS.

CTUARY.—In law, this word was originally used to designate a clerk, or registrar, in courts of civil jurisdiction. Webster defines an actuary as "the manager of a joint-stock company, particularly of an insurance company;—in America, chiefly ap-

pany." A better definition is, one engaged in what are termed contingent, or accidental calculations and estimates.

Annuity—Is an annual payment; or, a yearly income charged on the person or com-

pany granting it.

Assets—Constitute the entire property of all kinds belonging to a person or an association.

Assurance, or Insurance—Is a contract for the payment of a sum of money on occasion of a certain event, as loss, or death. In England, and, to an increasing extent, in America, assurance is used in life operations, and insurance in those of fire. The distinction, as made by Mr. Babbage, is this: Assurance is a contract dependent on the duration of life, which must either wholly happen or wholly fail. Insurance is a contract relating to any other uncertain event, which may partly happen or partly fail. Quite generally, however, the words interchange. Life Assurance may be defined to be a plan by which any sum of money may be secured at death, whenever that may take place, or be received at any given age of the life assured if the life continue.

Bonus—Is an extra dividend to the shareholders of a company, out of accumulated profits.

Dividend—Is the share of profits, or surplus, belonging to each partner or proprietor.

Loading—Is a sum added to a previous amount to make its sufficiency doubly sure

Policy—Is a ticket, warrant, or written contract for money in a public fund or society.

Premium—Is the sum paid for insurance or indemnity. By

Single Premium is meant a sum of money paid down, and in consideration of which, without any further payment, the sum assured will be guaranteed to be paid at any given age, or at the death of the assurer. By Annual Premium is meant a sum of money to be paid yearly until the death of the party, or for a limited number of years, as may be agreed upon.

Reserve.—This is the difference between the present value of the sum assured and the present value of the net future premiums. It is that sum for which the Policy to which it belongs could be transferred to and reassured by another company.

Reversion—Is the sum payable at death, or at any future period. It may be secured by the payment of a single or of an annual premium.

Reversionary Addition.—That sum which is added to a Policy for the Cash Dividend at the single payment rate. The amount so added is payable with the original policy. Scrip—Is a certificate of stock, or of a share of joint property.

Void—Means empty, null, having no binding force. All Life Assurance Companies have certain conditions, restrictions, or rules, the violation of which hazards or destroys the policy. These restrictions relate to travel or residence in other countries; the payment of pre-

miums when due, &c. If these regulations are disregarded, or if the party assured dies by the hands of justice, or in an attempt to violate the law of any country where he may reside or happen to be, or in consequence of a duel, or by reason of intemperance from the use of intoxicating liquors, or by his own hand; or if the annual premium be not paid in the manner prescribed, the policy is in most of these cases, either in whole or in part, forfeited.



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LITERATURE OF LIFE ASSURANCE.

OR the most part those who have written upon the subject of Life Assurance, have done so with the purpose either of developing its laws and foundation principles, or of exhibiting its calculations. Hence their writings are chiefly abstract and scientific. English authorship is the principal field of the Literature of Life Assurance. America has yet to produce its first decidedly great work on this subject. The publications enumerated, present a pretty complete catalogue of all works of any importance on the Assurance of human life that

have ever been written.

Griffith Davies on Annuities.

F. Bailey on Annuities.

Richard Price on Annuities (2 vols.)

Quetelet on the Theory of Probabilities.

An Essay on Probabilities, by A. De Morgan.

Sang's Essay on Life Assurance.

Sang's Valuation of Life Contingencies.

Jones on Annuities and Reversionary Payments (2 vols.)

The Sixth and Twelfth Reports of the Registrar-General of England.

Pocock's Chronological List of Books on the Doctrine of Chances,

The Insurance Guide and Hand-book, 2d ed.; useful.

Charles Babbage's Tables of Logarithms.

Joshua Milne on Annuities.

E. Baylis on the Arithmetic of Annuities.

Robertson on Life Assurance.

William Morgan on Life Assurance.

Alfred Burt on Life Assurance.

Edward Hully on Life Assurance.

Hoyle on Life Assurance.

Park on Life Assurance.

Neison on Vital Statistics.

Ansell on Vital Statistics.

Ellison on Life Insurance.

Dowdeswell on Life Insurance.

Millar on Life Insurance.

E. J. Farren on Life Insurance.

A. Scratchley on Life Assurance Societies.

Thackeray on Life Assurance.

James (J. H.) on Life Assurance.

The Handbook of Life Assurance, by C. B. Norton.

The Vade Mecum, by J. Baxter Langley, M. R. S. C.

The American Manual of Life Assurance, by Henry C. Fish, D. D., Newark, N. J.

The American Life Assurance Magazine (Quarterly), by G. E. Currie, 153 Broadway (seven bound volumes).

The Insurance Monitor, by T. Jones, Jr., 14 & 16 Wall st., N. Y. (monthly, and back numbers).

The Wall Street Underwriter, by Grierson & Ecclesine, 18 Wall st. (Life and Fire), monthly.

Insurance Reports (New York and Mass.), bound volumes.

Journal of the Actuaries; monthly, London.

Francis Corbeaux on Laws of Vitality, &c.

Law of Fire and Life Insurance, Geo. D. B. Beaumont.

Assurance Premiums, by Wm. Orchard.

Life Assurance Manual, by P. A. Eagle.

Farr's New Life Tables. Quarto, 1864.

An Appeal for Life Insurance, by G. E. Currie, N. Y.

Annals, Anecdotes, etc., of Life Assurance, by J. Francis.

The Law of Life Assurance, by Charles John Bunyan.

Fifteen Years' Experience in a Mutual Life Insurance Company, by S. Homans, New York.

What is Life Assurance? by Jenkin Jones.

The Medical Selection of Lives, by Wm. Brinton.

Medical Estimate of Life, by S. H. Ward.

Hutton's Mathematical Tables.

George Cardwell: a Life Insurance Tale, by N. D. Morgan.

Marshall's Tables of Value of Annuities.

Hodgson's Observations on Duration of Life.

Why Should I Insure my Life? by H. R. Sharman.

Practical Life Tables, by Alex. McKean.

Price's Observations on Reversionary Payments.

Commission Profits of Life Assurance, by S. Brown.

Treatise on Life Annuities, by F. Blayney.

New and General Notation of Life Contingencies, by Hardy.

Peter Gray's Tables of Life Contingencies.

W. E. Hillman's Tables of Life Policies.

David Jones on Value of Annuities.

B. H. Todd's Life Insurance Investigation Tables.

W. T. Thompson's Actuarial Tables.

William Wood's Conversion Tables.

Popular Tables, by Charles M. Willich.

Medical Examinations for Life Insurance, by J. Adams Allen, Chicago, Ill.

Banking and Insurance Chronicle, Chicago, Ill. Chisholm's Commutation Tables (2 vols.)





THE HISTORY AND PRESENT POSI-TION OF LIFE ASSURANCE.

OUBT hangs over the actual origin of the idea and the practice of insurance. In the year 1435 a Spanish writer issued a challenge to the world, claiming for Barcelona the honor of being the birth-place of this practice. The claim was met by the Italians, who quoted the rates of insurance on shipments from London to Pisa and Bruges as early as 1400. It was also ascertained by a chronicle of King Ferdinand that the contract of reciprocal insurance was known in Portugal as early as 1375. Many other writers allude to the practice of insphip-owners and merchants against losses by the

demnifying ship-owners and merchants against losses by the elements, or by enemies, at a much earlier date.

The invention of the *principle* of insurance has generally been accorded to the Romans, from the fact that the writings of Livy, Suetonius, Cicero, and Sallust mention stipulations of indemnity to contractors during the second Punic War, and a like surety granted by Claudius for delivery of grain during a time of great scarcity, as also the security claimed by Cicero for the carriage and safe delivery of the spoils of war gained by the victories in Silesia. The first English statute appears in the time of Ellzabeth, 1601, but it designates the system as of "tyme out of mynde, and a usage amongste merchants." The question of priority must therefore be accorded to *marine insurance*, and the invention to the Italians.

LIFE Assurance, also, dates far back in the annals of the past. It is common for writers on this subject to assign its origin to the beginning of the eighteenth century; making its existence hitherto to have been about one hundred and fifty years. But it has certainly existed twice that length of time. Indeed, we find traces of the theory of probabilities, (which underlies life assurance,) as far back as the time of Pliny, and even Plato, preceding the Christian cra. It is also certain that some four hundred years after Christ, a table was actually in existence by which annuities could be valued.

But that Life Assurance was absolutely practiced as early

as above stated, *i. e.* in the sixteenth century, is put beyond question by the contents of a volume in the French language called the Guidon (guide, standard), whose author is unknown, but which must have been written some three hundred years since. In this ancient document the writer speaks of "insurance made by some nations upon the life of men, in case of their decease upon a voyage, to pay certain sums to their heirs or creditors." Hence it appears that in his day "some nations" practiced life assurance. How much earlier we do not know.

From an old English work on *Usury*, printed in 1584, we learn that a particular feature of life assurance—endowments for children—supposed to be a very modern idea, was known and substantially practiced then (nearly three hundred years ago). The writer speaks of money being invested in a "Companie," which company agrees "that whosoever lendeth such a summe of money, and hath a childe of one yeere, shall have for his childe, if the same childe doo live till he be full fifteene years of age, 500 li. (pounds) of money."

We also find historical traces of the practice of assuring lives in Germany, of an equally early date.

The first scheme of importance, however, and which may be regarded as the foundation of the modern system of life contingencies, was the system of Tontines, invented by Lorenzo Tontie, or Tontine, a Neapolitan, in 1653.

The first public office for assuring lives which we are able to identify, originated with a clergyman of Middletown, Lancashire, England, named William Assheton, D. D., in the year 1698. His object was the benefit of the widows of clergymen and others, and for settling jointures and annuities. It went into operation under the name of "The Mercer's Company," in London. In 1700 another society was instituted called the "Society of Insurance of Widows and Orphans."

In the year 1706, the "Amicable Society of London" was founded; but it made this fundamental error, that the rates of premium were uniform for all ages assured; nor was any fixed amount guaranteed in case of death. Hence very little was done. In 1721 the "Royal Exehange," and "London Assurance" Companies were formed. But it was not until 1780 that the business of Life Assurance may be said to have fairly begun. In that year the "Equitable Society" (which eighteen years before had obtained a charter with the greatest difficulty, and had so far met with little success, so great was the ignorance prevailing upon the whole subject) adopted the Northampton tables as the basis of its calculations; its actuary or manager being William Morgan, who was aided by the advice of his uncle, Dr.

Richard Price, a celebrated writer upon the principles of Life Assurance.

Life Assurance was introduced into this country before the war of the Revolution. It was effected by a few Episcopalian clergymen who formed a society in 1769, called "The Protestant Episcopal Association for the Benefit of Widows and Children of Clergymen of the Commonwealth of Pennsylvania." The first public Assurance Company was the Pennsylvania, established in 1812, still flourishing. The Massachusetts Hospital Life Insurance Company seems to have been the next formed, in the year 1818. The New York Life Insurance and Trust Company was chartered in 1830, and the New England Mutual Life Insurance Company of Boston in 1844. But little attention, however, was paid to the subject in this country prior to 1843, at which time the Mutual Life of New York and several other companies went into successful operation.

At the present time there are in Great Britain nearly two hundred such companies; and the amount there assured upon life is estimated at £225,000,000.

In the United States there are about seventy Life Companies, receiving an annual income of nearly \$50,000,000. But little short of four hundred thousand lives are now assured, covering risks amounting to about \$1,000,000,000. These are striking proofs of the popularity of Life Assur-

ance. During each year, more than six millions of dollars are paid by the Life Companies in the United States to the families or representatives of the assured; mainly to widows and orphans.

The number of policies now issued, yearly, by all the Companies in the United States, is not far from 120,000. And the business is constantly and rapidly increasing.

A few words may be added on the stability of Life Assurance. It is too much to say that Life Companies have never failed. In England, up to the time of Richard Price (1780), assurance of life had been little better than a gambling operation. And much later, has there been great unfairness in business of this description; which, happily, is not true at present. A very few Companies doing life business in this country, have by mismanagement gone down; but the cause has been the union of other business with that of life. Not a single Company confining itself to its legitimate work has failed, nor is the thing conceivable, for there is scarcely room for contingencies. The experience of the commercial world can point to no such permanency as is seen in Life Companies, nor does any class of institutions compare with them for uniformity, safety, and reliability.



LIFE ASSURANCE COMPANIES.

E have spared no pains to be able to present here a full and complete list of the several Life offices in the United States. Such a list, it is believed, is found in no other publication. For reference, and correspondence, it will be of great convenience, besides the satisfaction that one feels in being "posted." We arrange them in alphabetical order.

Of the officers, it will be understood that the one first named is *President*, and the next, *Secretary*.

Æтма
American MutualNew Haven, Conn. Benj. Silliman, Benj. Noyes.
American Life and TrustPhiladelphia. A. Whilidin, J. S. Wilson.
American Popular New York city. V. M. Rice, J. Pierpont, Jr.
Atlantic Mutual Albany, N. Y. R. H. Pruyn, L. B. Smith.
Baltimore, Md. J. I. Donaldson.
Berkshire
British General New York city. Branch office.
Brooklyn Brooklyn, N. Y. C. W. Bouck, R. H. Harding.
CINCINNATI MUTUALCincinnati, Ohio. C. G. Megrue, G. F. Reynolds.
CHARTER OAK
Connecticut General Hartford, Conn. E. W. Parsons, T. W. Russell.
CONNECTICUT MUTUAL Hartford, Conn. Guy R. Phelps, W. S. Olmsted.
CONTINENT AL OF N. Y New York city. Justus Lawrence, J. P. Rogers.
Continental of Hartford Hartford, Conn. J. S. Rice, S. E. Elmore.

COVENANT MUTUALSt. Louis, Mo. G. B. Allen.
Economical Mutual Providence, R. I. S. S. Bucklin, W. Y. Potter.
Empire Mutual
Equitable
ExcelsiorNew York city. Samuel T. Howard, Sidney Ward.
GermaniaNew York city. H. Wesendonck, F. Schwendler.
GIRARD ANNUITY & TRUST. Philadelphia, T. Ridgway.
GLOBE MUTUALNew York city. Pliny Freeman, H. C. Freeman.
Great Southern & Western. New Orleans, La. Gen. Longstreet.
Great Western New York city. R. Bage, E. Dwight Kendall.
Guardian New York city. W. H. Peckham, H. V. Gahagan.
Hahnemann
HoмеВrooklyn. W. S. Griffith, G. C. Ripley.
Hospital Boston, Mass. Moses Hale, Scc.
JOHN HANCOCK Boston, Mass. G. P. Sanger, G. B. Ager.

Kentucky Mutual Cincinnati, Ohio. J. C. Beck, A. C. Dunlap,
KNICKERBOCKERNew York city. E. Lyman, G. F. Sniffen
Life & Accident
Liverp'l & Lond. Globe F. & L. New York city, branch. A. C. Pell, Agent,
Manhattan New York city. Henry Stokes, J. L. Halsey.
Massachusetts MutualSpringfield, Mass. Caleb Price, F. B. Bacon.
Miners' Life & Trust CoPottsville, Pa. Jacob Huntzinger, Alfred Huntzinger.
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National Travelers'New York city. James R. Dow, J. H. Taylor.
New England Mutual Boston, Mass. B. F. Stevens, J. M. Gibbons.

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New Jersey Mutual Newark, N. J. J. P. Bradley, William M. Simpson.
New York New York city. Morris Franklin, W. H. Beers.
New York State MutualSyracuse, N. Y. John Peck, G. P. Gardner.
New York Life & TrustNew York city. David Thompson, P. R. Kearney.
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North-Western MutualMilwaukee, Wis. S. S. Dagget, A. W. Kellog.
Оню
Penn MutualPhiladelphia. James Traquair, H. S. Stephens.
PENNSYLVANIAPhiladelphia. Charles Dutilh, Pres't.
Рыгарента Fire & Life Philadelphia, Pa. R. P. King, F. Blackburn.
PHŒNIX MUTUAL
PROVIDENT LIFE & TRUST Philadelphia, Pa. S. R. Shipley, Pres't.
PROVIDENT LIFE & INVESTMENT Chicago, Ill. Ira Y. Munn, C. Holland.
ROYAL F. & LNew York city, branch. A. B. McDonald, Agent.

SECURITY LIFE & ANNUITY . . . New York city. R. L. Case, I. H. Allen. Southern..... Memphis, Tenn. G. W. McCarn, J. B. Dodds STATE MUTUAL Worcester, Mass. Isaac Davis, C. Harris. St. Louis Mutual......St. Louis, Mo. D. A. January, W. T. Selby TRAVELLERS' (LIFE AND ACCIDENT) ... Hartford, Conn. I. G. Batterson, R. Dennis. Universal New York city. William Walker, J. H. Bewley. UNION MUTUAL OF MAINE.... Augusta, Me. H. Crocker, W. H. Hollister UNITED STATES New York city. J. B. Collins, Ino. Eadie. WASHINGTONNew York city. Cyrus Curtiss, W. A. Brewer, Jr. WESTERN Cincinnati, Ohio. WIDOWS' & ORPHANS' BENEFIT. New York city. Charles H. Raymond, H. B. Robinson.

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THE SCIENCE OF LIFE ASSURANCE.

OME grand foundation principle lies at the base of every science. This we know to be true of theology, medicine, jurisprudence, political economy and the like.

Now, what is the fundamental principle of Life Assurance, as a Science?

It is this:—the Law of Average.

We will make this plain.

By the word *law* (as *law* of nature, *law* of gravitation, and the like) is meant, the *regular* method by which certain effects follow certain conditions, or causes. When we have ascer-

tained how, or in what manner, or in what relative pro-

portion, certain effects follow certain causes, then we say we have found out the *law* regulating such and such things: as when observing men determined the *laws* regulating electricity, the tides, steam, trade, falling bodies, and the like.

Now, is there a *law* regulating the rate of mortality, or the falling of human lives in the aggregate? We should suppose so, beforehand, since nothing seems left to chance. Every thing appears to be *governed*, *controlled*, *regulated*: only sometimes the law, or rule, respecting the occurrence is too hidden to be detected. It is generally agreed that what we call chance is merely *direction not understood*.

"All nature is but art unknown to thee, All chance direction which thou canst not see."

Just how many and what kinds of accidents (as they are called) and *crimes*, even, will occur among a given population during a year, for instance, can be determined with certainty beforehand. Just how many letters will be mailed undirected (from haste or carelessness in correspondents) out of any large number of letters, can be known beforehand, on the ground that what has occurred will recur. Again, it is demonstrated that just such a relative number of white and black balls, in a given number of drawings, will be taken from an urn where they are mixed promiscuously. This has been found out by actual experiment.

Or, throw into the air some thousand times a number of pennies, say fifteen hundred. It can be reckoned beforehand just how many "heads" and how many "tails," in the whole number of throwings, will be up or down. Nothing would be more uncertain than whether it wou'd be "head" or "tail" in one throwing of one penny; but the average in many throwings of many pennies can be got at exactly.

We should expect, then, that there would be a law regulating the falling of human lives, so that we could average them, or get the proportion of them;—so many out of such a number falling in a given time.

And this we find to be the case. The duration of any one life cannot, of course, be known; but that of a multitude of lives is easily ascertained. Or, to change the expression, nothing is more uncertain than the duration of individual life: nothing is more certain than the average continuance of life. In the same age and same country the rate of mortality from pestilence, war, &c., &c., may vary; but even these variations are doubtless governed by fixed laws; and looking at all periods and all countries, the variation does not exist.

The facts proving these statements have been brought to light by the study of statistics. For upwards of 200 year tables have been kept in different parts of the world, to a greater or less extent, showing the births and deaths of indi-

viduals. These are generally called tables of mortality; and upon these the duration of life has been calculated with almost unerring accuracy.

By these it is ascertained, for instance, that if we take 10,000 persons in the prime of life, 1,200 will die the first ten years; 1,500 the next ten; 1,700 the next ten; and so on till all have passed away. 10,000 persons at the age of 25 years will attain the age of 62 years on an average; at the age of 35, 65 years; at the age of 45, 68; at the age of 55, 71. The average age at death of all born, is about 33 years. Or we may say that any 1,000 persons in ordinary health at the age of 25 will yet live to average about $37\frac{1}{2}$ years each; at the age of 30, about $34\frac{1}{2}$; and at the age of 35, just 31 years each; and so on.

Now, calculations having reference to money values may clearly be made upon any circumstances sure to recur. Having, then, before us, the probability of death in each year of age, we have only to charge each individual that sum which is the aggregate of the present values of the cost of insurance for each successive year of life, and we have what may be termed the cost of assurance. If one lives longer than those assured with him, he helps those who die early: if he dies early, they help him. In this way a perfect average is secured, which, being based on accurate and sufficient lifetables, is just as reliable as the equilibrium of the planets.

The deficient payments of those who die early are compensated for by the additional payments of those who live longer. Of course, to the actual cost of assurance, there must be added office and other expenses, use of capital, a surplusage for security, etc., and all these put together make up what are called the rates of assurance, rendering it safe to issue policies at these charges, whether for the whole term of life, or for a certain period, on the endowment plan.

The following, from the pen of an unknown writer, is a pretty lucid statement of the theory and practice of Life Assurance:

All Insurance is but the taking upon many the risk of one, so that if he loses what he insures they collectively shall make it good to him. If they be a thousand, his loss divided among so many hurts nobody; while if it had fallen upon one only it would have ruined him. Say, for example, that one thousand persons, at the age of thirty, assure each other for life to the amount of \$1,000 each, and that each pays for this protection a yearly premium of \$23.60. The collective premium will make \$23,600. The casualties the first year will be probably eight, so that instead of the society having to pay back the whole \$23,600 which they have received, they would have to pay back but \$8,000. This

will leave, with accrued interest at four per cent., \$16,544 on their hands to meet subsequent losses, and this fund with future premiums, as fast as received, will be put out at interest. The next year sees the business renewed in favor of nine hundred and ninety-two survivors, of whom a like number will die during the second year, say eight persons. To the heirs of each of these again is paid \$1,000, collectively \$8,000. The third year sees nine hundred and eighty-four survivors whose premiums bring in \$23,222. Once more, an increased number of these, or nine, die during the third year, and \$9,000 is paid to their representatives. The fourth and each following year proceed in like manner until about the sixty-fifth year they will in nearly every case all have died, and a thousand times \$1,000 will have been paid them; that is \$1,000,000.

To the INDIVIDUAL, then, Life Assurance holds out PROTECTION; and to the CAPITALIST, the profit of taking those chances of life and death which the individual must not run, and can fairly pay to have lifted from his shoulders; as is the case when one takes advantage of fire or marine insurance.





THE PRACTICE ELUCIDATED.

EDUCING to practice the theory as explained in the foregoing chapter, there are a few points that may require further elucidation.

The working plans of companies differ. While all are based upon the same fundamental principles, they are organized upon different systems, and vary in the conditions adopted, and in the detail and application of benefits. Thus, there are joint-stock companies, strictly so called, in which a capital is furnished as security to the assured, by individuals who receive all the profit or surplus

premiums of the business, as a remuneration for the risk and

use of their capital. And the mixed, or part proprietary company and part mutual, having also a joint-stock guarantee capital, but allowing a portion of the profits, or all the profits, to policy-holders, after deducting legal interest upon the guarantee capital. And the purely mutual companies, in which all the surplus, or profits of the business, belongs to the policy-holders in proportion to the premium they pay. There are also companies in which the payments of policy-holders are wholly in cash, and others where partial payment is made in notes.

The matter of profits, dividends, &c., may also require some explanation. If there was but one invariable rate of mortality from which we could determine the exact number of assured persons who would die at each age; if the rate of interest never fluctuated, and it could be precisely determined per policy what the expenses of management would be, the rate of premium deduced therefrom would be, as we have previously stated, the exact value of the sum assured. But as it is impossible to obtain an absolutely accurate rate of mortality, and also to prevent the admission of some bad lives, and as the interest of money is constantly varying, it is absolutely necessary, for the security of the assured, to be certain that the premiums charged are sufficiently high to cover the risks incurred. Hence, the rates are expected to be somewhat higher than will eventually

prove to have been necessary. Here is an income or source of profit.

To this must be added several other sources of revenue. In calculating interest the rates are ASSUMED at 3 per cent. in England, and in this country at 4 per cent.; while a company, in fact, receives 6 or 7 per cent., often more. This is done by judicious investments, or loaning on good These investments, of course, are drawing interest, which interest is again reloaned, making an investment at compound interest. These interests are an accumulation to the benefit of the company; which, in a few years, in a successful one, whose expenses are proportionate to their business, amounts to a large sum. Again, in order to cover expenses and still further to provide against all contingencies, the companies universally add to the rates obtained by calculation from correct tables of mortality, a loading of from 20 to 40 per cent. This is usually found more than is necessary, and forms another source of profit. Moreover, the lives which are assured are much better than the average of lives upon which the tables of mortality are based, the average expectancy being increased by the judicious selections made by the office; this consequently results in a profit. A profit is also acquired by the lapse, or loss, of policies from non-payment, and by the purchase of policies,

as the company always reserve a sufficient amount to indeminfy them for the risk already incurred.

In these several ways, and others incidental to the business, it happens that all companies managed with prudence, accumulate a larger amount of funds than is necessary to provide for future losses.

The adequacy of the premiums charged is tested by a "valuation" of the income and liabilities of the Society, which the offices make at certain periods, and if it results that they have a surplus after putting by sufficient to meet every probable claim upon them, they then distribute their profits. All profits in purely stock companies are divided among the stockholders; while in mutual and mixed companies they are distributed among the life members in an equitable proportion. In the distribution of surplus funds periods of three or five years have usually been preferred to shorter ones; because the rate of mortality is generally supposed to be more uniform among a large number of persons, and extending over a long period. Many companies in England, for this reason, make their dividends only once in seven or ten years. In some companies, however, both in England and America, the dividends are declared annually. The funds returned to the assured are generally disposed of as each may prefer; either to reduce the annual

premium, or to the purchase of additional assurance without farther charge for premium (adding the dividend to the policy), or to abate the amount of future premiums, the sum assured remaining the same.

A few words may be in place as to the *lapse* or *surrender of policies*. It is sometimes complained by those wishing from any cause to withdraw from a company, that they do not get the full value of their policies.

Professor De Morgan observes on this, "Among the sources from which the offices draw profit, are lapsed policies. But what they receive by the lapse of the policy is not all profit; but only that portion by which the premium for the whole life exceeds the premium for a temporary assurance. Every premium which is paid by an assurer contains the consideration given for the chance of his dying in each and every subsequent year. If, then, he remain a member of the office and stand the risk of death during a certain number of years, all such part of his premiums as was consumed for the risk of those years become due to the office and was taken by the office as compensation for the risks, and cannot, therefore, be said to fall to them as profit upon the lapse of the policy. Two individuals, A and B, go to the office on the same day, and assure their lives for the same sum, A upon his whole life, and B

for seven years. A pays, say £10 of premium, and B £7. At the end of seven years A allows his policy to lapse just at the time when B's policy expires by its own construction. What does the office gain by the lapse? Evidently, the temporary annuity of £3 by which the two premiums differ. The £7 paid by A out of £10 is not more than sufficient to pay his share of the claims which arose during the years which he continued in the office; the remaining £3 was a reserve for future years, which becomes profit to the office on his declining to stand the risks of these years."

This would seem to be sufficiently plain. The principle of assurance is, that the claims of those who die early are paid by the contributions of those who live long; therefore, if the *whole* of the premiums were returned to parties surrendering their policies, it might become impossible for an office to fulfill its engagements.





THE MORAL ASPECT OF LIFE OPERATIONS.

O view could be more incorrect than that LIFE transactions are simply like other insurance transactions. They are of a far higher and more sacred character. They differ in these important respects.

Other kinds of insurance, for instance, pertain to property merely. A fire or marine insurance company deals simply with material objects—assumes risks upon houses, ships, merchandise. And then, again, its transactions are with one party. They begin and terminate with the insured.

Not so with a Life Company. Here the operations touch human existence. They relate to its fall or continuance. That for which one will "give all that he hath" is the matter bargained about. A man may speculate in property, but how abhorrent the idea of speculating in human life! A man may barter and banter where mere goods are concerned; but what a degradation to bring life operations down to this low level! A man may think lightly and speak flippantly of the destruction of barns and merchandise; but of the end of earthly existence he is expected to entertain a degree of seriousness.

Then, too, the Life office has to do with other parties than the assured. It is virtually acting for widows and orphans. It assumes to be their almoner and protector. A husband and father entrusts to it what is expected to mature only at his death. If there be fraud or unfairness, it is at once against the dead and the living. The wrong takes place when the party originally dealt with cannot set up a defense for the innocents; since he is no more one among them. And those for whom he toiled, and planned, and sacrificed, are now deprived at once of their just rights, and of the fruits of his efforts. Their sustenance is taken from before their mouths. The table is bare, where love, in anticipation, spread a bounteous repast. The guardians of the now defenseless ones have become their despoilers. How

could there be a grosser wrong—a more aggravated wickedness?

Viewed in this light, how high the obligations which a Life office assumes! How sacred its trusts! And, consequently, how honorable and how elevated should be its aims and operations!

Now, an agent is expected to be the exponent of this moral dignity which ought to invest transactions in life. He is the representative of these transactions. Men form their ideas, not only of his particular Company, but of Life Assurance itself, from him. Any act of an Agent which is not honorable, has a direct tendency to dishonor himself and all his fellow-laborers. And not only this, it brings odium upon the whole institution. It poisons the system of Life Assurance, and works so much towards its ruin.

For these reasons, a Life Agent ought to be the very highest style of a man. What a fire, or marine, or banking or other agent may be, is nothing to him. He is to be much more than is expected of others. There is to be in him more of conscience; more of genuine goodness; more of the powers of honest persuasion; more of the capacity to appreciate and to use those motives which appeal to the higher and finer sensibilities.

And we earnestly maintain that Life Assurance will never realize its best capabilities, until it is practically elevated to the high moral position here assigned to it. In the following chapter, the aim has been to analyze and set in order, and to inculcate the principal elements which constitute a permanently effective agency.





THE QUALITIES OF A GOOD AGENT.

1 HE APPRECIATES HIS WORK.

NE can generally form a pretty accurate opinion of a Life Company by an acquaintance with its agents. The good agent understands and appreciates this fact, and also that men will judge of the whole system of Life Assurance by him.

Accepting an appointment, therefore, he feels his responsibility. He has high ideas of his work. He looks upon it as benefiting the party assured, by giving to him quiet of mind; by inducing habits of economy, sobriety, and forethought; by setting before him an honorable

motive to action and enterprise, and by leading him to the discharge of a sacred duty.

He considers that his efforts are helping to rid the community of poverty and its frequent attendants—vice and crime. And also that he is strengthening the sinews of social life by every policy he obtains. And what is more, that he is befriending the poor and needy; wiping sorrow from eyes dimmed with tears, and deserving the tribute of gratitude awarded to one of old: "When the ear heard me then it blessed me, and when the eye saw me it gave witness to me; because I delivered the poor that cried, and the fatherless, and him that had none to help him. The blessing of him that was ready to perish came upon me, and I caused the widow's heart to sing for joy."

An eminent minister once said: "Were I to leave the ministry, I should take an agency for Life Assurance; for I consider that it, next to direct religious efforts, is doing most to benefit society." And a very high authority—the Hon. Elizur Wright, late Insurance Commissioner of Massachusetts—says: "Among the honorable workers in the civilized world, to whom the public as well as the assured will die indebted, we give faithful and successful Life Assurance Agents a high place; and no field that we know of is more inviting to an ambition that would devote the

best of talent to the benefit of society at large, and individuals in particular."

To have such a conception of the value and dignity of an agent's vocation, is an important point gained. In such a case, where the motives of worldly policy are pleasantly mingled with higher moral considerations, and all these blend together in the beautiful philosophy which constitutes the chief charm of Life Assurance, the business of an agency will be both agreeable and successful. But without this appreciation of his work, how can an agent expect to succeed? How can he have faith in it, and impart to others confidence and interest in it? If he does not appreciate its benefits, how can he forcibly place them before others?

As a first thing, then, let an agent endeavor to rise up to a just estimate of the value and the moral grandeur of his undertaking. (See also, on this, page 43, etc.)

2. He is Moved by High JMPULSES.

WRITER observes that some agents walk about like apprentices to an undertaker, proclaiming in sepulchral tones the uncertainty of life, &c., and they never succeed; while some of the jolliest fellows in existence are very successful agents, because they carry sound

and well-balanced minds, with a love of their fellow man, and can appreciate and feel the motives that will sway those with whom they come in contact.

We have seen men acting as agents, who seemed to feel that they were doing a mean sort of work, and needed to beg pardon of all creation for being about such work—for being alive, we had almost said,—whereas, they may well hold up their heads, and go out to their task animated by the very highest motives of philanthropy and moral obligation.

One should look upon his business in the light already presented, as a great public benefit, and feel that it does not detract from his being a promoter of the general good of mankind because he gets a living by his labor. He who does the state a service while at the same time earning an honest livelihood, is deserving of double honor, first because he promotes the public weal, and next because he secures his dependents against want.

Let a Life Agent, then, feel self-assured and confident. He need not depreciate his calling, as compared with any other business or profession whatever. Merchants, law-yers, physicians, school-teachers, secretaries and agents of benevolent societies even, are often doing less to scatter benefits throughout the human family, than are honest and efficient Life Agents. Far be it from them to feel that they

are palming off something that is not worth what is paid as an equivalent, and infinitely more too. If not now, some time, blessings will be pronounced upon them.

3. HIS HEART IS ENLISTED.

F a celebrated living actress, whose powers are worthy of a better cause, it has been written—

"We listening weep; but every burning drop Flows from thy heart, ere falling from our eyes."

To make others feel, we must first ourselves feel. Deep conviction is contagious. It wins its way. It speaks in the eye, the looks, the tone. Other things being equal, a man's force in impressing others is in the ratio of his own heart-force. Says Goethe:

"Persuasion, friend, comes not by toil or art; Hard study never made the matter clearer; 'The the live fountain in the speaker's heart Sends forth the streams that melt the ravished hearer. Would you, then, touch the heart, the only method known My worthy friend, is first to have one of your own."

All this applies well to a Life agent. If he loves his work; if he puts his heart under it, look out for results! To do much, he must be full of it. A Secretary once

wrote to a newly-appointed agent: "Your very boots must creak the name of your Company!" It reminded us of the advice of Dr. J. W. Alexander to a ministering brother, as to having his heart enlisted in sermonizing: "Live for your sermon. Live in your sermon. Get some starling to cry—"Sermon! sermon!"

No class of men ever propagated a great interest, and carried it through to victory, who did not first wed it, and wholly cast in their lot with it for better or for worse.

All effective agents have "Life Assurance on the brain." They spring to their task with an elastic and buoyant spirit. Write it down as a rule, that no man ever does much who is not enthusiastic in his profession or business—who does not think his enterprise, whatever it be, the greatest, or at least one of the greatest, and most important in the world. Only then are his energies untiring. Only then does the fire in his own soul kindle upon the souls of others.

4. He is Active and Industrious.

HEN a lady once asked Turner, the celebrated English painter, what his secret was, he replied: "I have no secret, madam, but hard work." This is a secret that many have never learned, and from this cause

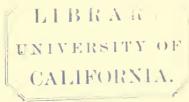
they don't succeed. Labor is the genius that changes the world from ugliness to beauty, and the greatest curse to one of the greatest blessing.

It is eminently true in Life Assurance, that "the hand of the diligent maketh rich:" while "idleness clotheth a man in rags."

There is no way of getting on well in a Life agency, short of absolutely hard work, and the devotion of time to it. The agent must be a man not only to 'strike the iron while it is hot,' but as Cromwell said, 'to make the iron hot by striking.' "Peu et peu,"—little by little—is a motto to be hung up in the agents' office. Or this: "Only work wins."

Luther was once asked how he found time to translate the Bible. His reply was, "I did a little every day." And Beethoven, when fifty-two years of age, wrote to his friend Wegeler, "My maxim has always been nulla dies sine linea—(no day without a line), and if I allow my muse to slumber, it is only that she may awake with fresh vigor."

A Life agent accepting such sentiments is on the road to success.



5. He is Courageous and Deter-

NE should not accept a Life-agency until he has made up his mind to succeed. It has its difficulties and discouragements. But you must remember that a man can hardly be expected to jump into any splendid business at once. Very few agents are as successful as they could desire at the outset. One of the most efficient agents in the country worked diligently for six weeks before he took his first risk; but he said, "I am bound to succeed." During the next three months his commissions were over twelve hundred dollars.

"The wise and active conquer difficulties By daring to attempt them; sloth and folly Shiver and sink at sights of toil and hazard, And make the impossibility they fear."

The old Crusaders used to say, "Faint heart never won fair lady." Another adage in everybody's mouth declares that "Fortune favors the brave."

That famous educator, Miss Mary Lyon, of South Hadley, Mass., used to say to her pupils, "If you commence teaching and do not succeed, teach till you do succeed."

If the agent gets sorely disappointed in cases where he

was confident, let him nevertheless remember the lines in the Loves of the Angels:

"Hope's precious pearl in sorrow's cup Unmelted at the bottom lay, To shine again when, all drunk up, The bitterness should pass away."

A newly-appointed agent once said, when finding it hard to get a start, and to make both ends meet in living. "I will share a dry cracker with my wife sooner than give it up!" We scarcely need add that he had a per manent success.

Here one may well write over his office-door General Grant's famous dispatch, "I will fight it on this line," etc. or the couplet of Sir Walter Scott:

"Come one, come all—this rock shall fly From its firm base as soon as I."

Never, in a solitary case, have we known an agent to complain of a lack of business, if he patiently went at it with full faith that

"In the bright vocabulary of youth There's no such word as FAIL!"

6. He has Tact and Discrimination.

THE great thing in assuring men is to use that particular argument at the right moment which will gain the object. Or, which is the same thing, to say just what will carry conviction and lead to immediate and conclusive action—and nothing more. Of some men in urging assurance it may be said,

None seconded, as out of season judged, Or singular, or rash."

Some agents presume too little. Better take for granted that the man you approach will assure. Better assume that he is ready. Approach him saying, "Here is something for your interest; something you want; perhaps the best thing you ever met with." Tell him what it is, and act as if you expected him to close up the matter at once.

Some agents talk too much. Never is a flood of words more out of place than in urging Life Assurance. Don't talk the man to death! Let him have time to breathe, and breathe yourself. Watch the motions of the countenance. Trace the workings of the mind. Mark what pleases. If you have made a point, don't unmake it. Now be cautious in speaking! One indiscreet remark just at this moment may be fatal to your purpose.

Some agents explain too minutely. They are too fear-ful—scrupulous, shall we say—lest the man shall not see everything about the whole subject. So they must argue and demonstrate, until the man's mind is confused, or rendered indifferent. Aim to persuade, to move, rather than to convince. Very likely he believes in assurance now. Address yourself to the one work of leading him on into it.

At a meeting of solicitors the question was once raised: "What tables do you find most popular?" One replied: "I never ask 'what table do you prefer?' I tell him what table he wants, and go about assuring him! I get out the application, and ask for his full name, and hold the pen to write it down; and so carry the man right along with me till the thing is completed!"

Oftentimes a bold move of this kind is most successful. In other cases things must proceed with greater deliberation. At any rate, don't commit the man if there is danger of a refusal. Don't hear it, if given; but leave the matter for some other time.

Let an agent, in these and other particulars, study human nature, and acquire tact and discrimination. If thoughtful and attentive, he will be sure to acquire it, and much more readily than he may imagine.

7. HE SPEAKS THE TRUTH.

"First in the glories of thy front Let the crown-jewel Truth be found."

REQUESTING of an officer in a Life Company to name a subject for an article to agents, he said, "Write on this: How to get along without lying." And he added, "Agents will lie!—they tell anything that suits their purpose—and this gives a bad name to the whole business." Certainly this is far from being true of all agents, but it is true of too many.

It is high time that Life Agents set their faces against this practice of deception. They may rest assured that here, as everywhere, "honesty is the best policy."

"A man of sense will artifice disdain,
As men of wealth may venture to go plain."

In the end misrepresentations are pretty sure to be visited upon the offender's own head; so that

"They that act unjustly Are the worst rebels to themselves."

And how abhorrent the idea of trifling with the confidence of men, and so misleading and deceiving them that they shall hereafter say: "He is dishonest; I would not believe him under oath;" as one was lately heard to say of

an agent who had told him what proved to be untrue in respect to his premiums and dividends.

Benjamin Franklin is often quoted as authority for the value of Life Assurance, and very properly so. But Franklin said, "Let honesty be as the breath of thy soul."

8. He has a Good Reputation.

F an agent's *veracity* men ought not only to be able to affirm,

You may believe, and pawn your soul upon it;"
but they ought to be able to compliment him throughout as a thoroughly honest and true man.

The remark has been made by somebody, concerning writers, that "it makes all the difference in the world who is behind the pen." If we know that a writer or speaker is tricky, scheming, hypocritical, or corrupt, we refuse to be influenced by him. On the other hand, it is remarkable what weight the words of a man of character have.

All this is equally true in business success. And hence the reputation of an agent in the community should be unequivocally good. It will be found a chief element of strength. Let him aim to be an honor to the Company he represents remembering that it will be judged of by him,

and that he should do nothing to derogate from its good name, or from the reputation of Life Assurance in general. Let him be strictly temperate, and in all respects so bear himself that even his opponents will be compelled to say,

> "I've scanned the actions of his daily life With all the industrious malice of a foe, And nothing meets mine eyes but deeds of honor."

9. He is Agreeable in Manners.

TREATING everybody in a respectful way, is one of the surest means of getting on in the world. It costs but little, and is worth a great deal. A buffoon,

"Fit for the mountains and the barbarous caves, Where manners ne'er were preached,"

is out of place in a Life Agency. Coarseness, vulgarity, looseness of conversation, repulsive manners—all this is disgraceful, and a serious drawback upon success.

So honorable and beneficent is the vocation of a Life Agent, that we instinctively demand in him a correspondence to the portraiture,

"Tho' modest, on his unembarrassed brow Nature had written "Gentleman."" We demand that he shall be

"— For courtesy, behavior, language, And every fair demeanor, an example."

The pen-picture of a quaint writer, sketching the *true* gentleman, is worthy of the study of a Life Agent:

"He is above a low thing. He cannot stoop to a mean fraud. He invades no secret in the keeping of another. He betrays no secrets confided to his own keeping. He never struts in borrowed plumage. He never takes selfish advantage of one's mistakes. He uses no ignoble weapons in controversy. He never stabs in the dark. He is ashamed of inuendoes. He is not one thing to a man's face, and another behind his back. He may be trusted out of sight -near the thinnest partition-anywhere He buys no offices, he sells none, he intrigues for none. He would rather fail of his rights than win them through dishonor. He will eat honest bread. He tramples on no sensitive feeling. He insults no man. If he have rebuke for another he is straightforward, open, manly. He cannot descend to scurrility. In short, whatever he judges honorable he practices toward every man." To such gentlemanly bearings as this, large tolerance will be yielded, even under the most persistent urgency.

10. He is Devoted to his Calling.

IVE MEN are nowhere more needed than in Assurance Agencies. They are a necessity in a community, and probably always will be, because men will not spontaneously go into Assurance. Instruction, persuasion, reminding them of an imperative duty, is essential. Here is room for the perpetual play of an agent's best powers. Unless he stir up men, a great obligation is passed by unnoticed. There is no adequate substitute for activity among assurance agents. The public is practically incapable of performing its duties without the continual urgency of individuals whose interest it is to importune men to do themselves justice. And it is surprising how much a few energetic minds—one energetic mind, even—may do towards informing and exciting the public on this subject.

Agents often distrust their ability to succeed in the business of Life assurance to such an extent as will warrant them in devoting their whole time to it, and so they make small gains by other means. But the lesson of experience is, that in order to succeed, all the tact, ability, and energy must be concentrated on this one work.

The essential thing is that the agent be absorbed in his vocation. The largest powers become weak when divided

and dissipated among many aims. Inferior powers are mighty when concentrated. It is very seldom that a man does different things well. Life agents who have rolled up for themselves a splendid income, have not done it by carrying on other matters at the same time. They took up Life Assurance as a business for life; and they prosecuted it with singleness of aim, and an absolute concentration of their best faculties.

11. His Interest is in One Com-PANY.

NLESS it is specially understood at the time an agent receives his appointment that he has liberty to solicit applications for other companies, it is expected that he will work exclusively for the company appointing him. The reason is plain. No agent can do full justice to any one company when he is equally interested in advocating the claims of one or two more. He should have his preferences in order to make others have theirs. And the loose, scattering way of offering one thing or another with equal recommendation, is injurious to all

parties. A high authority remarks, that "however it may appear to a novice in the business, it is the uniform testimony of agents who have had large experience in Life Assurance, that it is far best to bring all the ability and enthusiasm one can command to the advocacy of the claims of a single company."

12. CAREFUL IN SELECTING RISKS.

T cannot be too deeply impressed upon the mind of an agent, that poor risks are a damage both to himself and to the company. The officers watch the losses as closely as they do the business of the agent. Some men secure a large number of policies, and at the same time are careless as to the selection of the risks; and the result is that the ratio of the losses through that agent exceed that of the average ratio of the company's risks; and so in the end he is dismissed in digrace, and loses the benefit of his labors, and also his position as a life agent; while those who have done a much smaller business, and done it carefully, are strengthened in the confidence of the company, and permanently retained. One loss in your new field may more than counterbalance the profits of your agency for a year every way show to the Company that they can rely upon your judgment.



BEGINNING THE BUSINESS.

1. Personal Canvass at the Outset.

EFORE one can become a successful manager of a Life Agency, he must have had actual work in getting applications. This is beginning at the bottom.

Nothing can compensate for the lack of this lesson at the feet of that best teacher,

e Experience.

A beginner in the business must therefore begin here. He will in this way learn more in a few days than he would in weeks of theorizing. Let him take right hold of canvassing, without stopping for anything. Let him try his

hand at it, and learn how to use his tools by using them. If you are timid, doubtful, strike out!

"Tender-handed stroke the nettle, And it stings you for your pains; Grasp it like a man of mettle, And it soft as silk remains."

And remember the saying of a French author: "It is the first step that costs." That is the difficult one. Take that; take it rightly, and half the trouble in starting business is got along with.

2. A Policy on his Own Life.

A CIVIL engineer once had finished a complicated railroad bridge, when many speculated and doubted as to its strength. Mounting a huge engine, he ordered it out upon the bridge, and crossed and recrossed at full speed. He thus gave proof of his faith in his own structure.

A Life agent is expected to do likewise. If asked "Are you assured in this Company?" it would be a sorry answer if obliged to say "no!" But if he can say "yes," it will act as an inducement to others. And all the better if he can say "I have a large policy;" naming a heavy amount.

It should be added, that your taking a policy on your own life is evidence to the Company of sincere earnestness in accepting an agency. It is also an excellent habit to carry your policy, (as well as a list of large policyholders and the sums they are assured for,) in your pocket, and show it on suitable occasions, pointing out its provisions and advantages.

3. FAMILIARITY WITH LIFE ASSUR-

EISURE hours should now be employed in "read-✓ ing one's self up" as to Life Assurance:—its origin, history, science, and a thousand other facts and particulars. Reports of 'Commissioners' are valuable. A monthly Assurance Journal will be found stimulating and rewarding. An agent should not be a novice. If he shows familiarity with his business it gives other persons confidence in the Company he represents. Then, too, one perfectly familiar with his business, and the relations which exist between the assurer and assured, has the power to enforce the advantages of the whole system of Life Assurance to the conviction of his friends in a manner at once agreeable and pertinent. It requires no great power of persuasion to induce people of ordinary prudence to insure their property against destruction by fire or water, but it does require some power of persuasion, and appropriateness of illustration, to induce one to take a life policy.

Hence, if one would be master of his business, he must be a round-about, full, broad-minded, and ready man.

4. Posted as to his Company.

It is especially necessary that an agent understand all about the Company he represents. Its strong points should be appreciated, and kept prominent. We know agents who say very little, but come right to the special advantages offered by their Company, and generally carry their case.

Where objection is made that in this or that particular some other company surpasses yours in advantages, the agent must be able to give facts. Hence, he should know, and be ready to produce whatever considerations will relieve the apparent difficulty or objection. From this it will be seen how important it is to be thoroughly posted on the comparative merits of his own and other companies.

5. HIS MEDICAL EXAMINER.

HERE the agent has the selection of his medical examiner, one of undoubted skill and soundness of judgment should first of all be sought. If to this be added

agreeable manners, and a pleasant way of approaching and handling men, rather than a brusque, cold, repulsive way, as is sometimes the case, it will be a valuable qualification; for the bearing of the medical examiner has a great deal to do with making it pleasant for applicants.

The agent should also, if possible, induce the physician to take a policy in the office employing him. And where this is not possible, he should use every endeavor to interest the examiner in the success of the agency, and secure his influence and co-operation. In many cases, the consulting physician will give the agent a list of his patrons, and his card as an introduction. It is a great point gained if the doctor be thus enlisted as your helper.

Get the medical examination made at once after obtaining each proposal. See that your doctor attends to it without delay.

6. Acquaintances Registered and Visited.

SOON as a start is thus obtained, the agent should make out a complete list of all his friends and acquaintances, and set about the work of seeing and addressing them personally:— perhaps sometimes sending, in

advance, a card, circular, or office-book. He should not overlook or neglect doubtful cases, for the most unlikely are often the first to assure. He should count no visit lost. Where it is not convenient for the party to give you a hearing now, the interview had better be deferred. There is no use in pressing the matter upon a man's attention when his head is full of something else, or when he is in a hurry, or in bad humor. There may be persistence without giving offense, or provoking a rebuff. And however coldly received, or even insulted, bear it, and when it comes around right, try it again. By all means, never allow yourself to be annoyed; keep your temper on all occasions, and at all times "learn to labor and to wait." Always endeavor to leave a good impression. It will be of value to you at some future time.

J. Making New Acquaintances.

PERSONAL acquaintance with men is your great stock in trade. By every suitable means this should be extended. If starting business in a city or village where you are not generally acquainted, it will be well to turn to the banks, public societies, companies, and associations of various kinds, as found advertised or registered

in the fly-leaves of the *Directory*, and thus ascertain the leading men of the place. Make out a list of those you do not know, and seek means and opportunities of favorable introductions to them. In time, you may approach almost every one of them. It is an advantage, also, to belong to literary and other societies.

8. Getting Names for Reference.

A BOARD of local references can in most cases be readily obtained. But it is of great importance to secure the best known and most respectable citizens. You can frankly state to such that it would be an advantage to have the use of their names, and that you would like to be able to say they are assured in your company. This will be a motive that you can use in soliciting them to take a policy. Those to whom you refer should, if possible, be policy-holders in the company. In very rare cases (of highly distinguished persons) this rule may be departed from.

But, whether holding policies in the company, or not, those to whom you refer should be carefully informed of the peculiarities of the company, and enlisted in its behalf. To gain this point in respect to a particular individual is often worth any amount of effort,

9. TREATMENT OF OTHER AGENTS.

THERE can be no reason why agents of different companies residing in the same town should not, as a rule, be on good terms with each other. At any rate there should be no discourtesy between them, and all attempts to procure business by depreciation of other agents and companies will generally be to the detractor's disadvantage. Excepting where the unworthiness of a company, or its agent, is notorious, insinuations as to its being in "a dangerous condition," and its officers being "unworthy to be trusted," and the like, prove an injury to Life Assurance generally, and, to say the least, are of doubtful temporary advantage. It is generally sufficient to show the excellencies of your own company.





MANAGING THE BUSINESS.

1. ORDER AND METHOD IN EVERY-

ET the agent keep in mind that "order is heaven's first law." In the office there should be "a place for everything and everything in its place." A slovenly appearance in the office is indicative of careless habits generally.

An agent's books should be systematized and well posted, so that he can turn to any point in a moment. Every possible fact should there be properly recorded; such as his accounts with the company, and with each policyholder, and the residence, &c., &c., of the latter.

And it is very desirable to devote a particular part of each day, regularly, to canvassing. Without this one may do business; with it, he must do it.

2. RELATIONS TO THE HOME OFFICE.

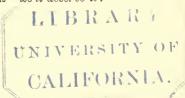
VERY good agent will feel a pleasure in acquiescing with the Company's rules and regulations respecting agencies. He will be prompt and regular in all reports and remittances. He will be frank and honorable, eschewing all double-dealing, secret negotiations with other companies while he is supposed to be acting in good faith for his own, and the like. He will write to the President, or General Agent, confidentially, and show in every way that he has the company's interest at heart. Whatever affects the company's standing or success, he considers as affecting him. He feels closely identified with it, and therefore works for it with a zest. If the least misunderstanding arises, he is quick to have it explained and made right. At the same time, if there be any points connected with the business that he does not clearly comprehend-such, for instance, as the various methods of assurance offered, the mode of dividing profits, etc., he does not remain in doubt, but writes at once for information.

3. Satisfied with Terms.

SOME agents are given to perpetual uneasiness as to terms, and better chances, etc. But it should not be forgotten, that what is for the agent's interest is for the company's interest; and that therefore it is to be presumed that a company will deal liberally with its agents. Whatever is reasonable will be pretty sure to be granted.

And an agent may settle this in his mind: that what ever he is worth he will in the end fetch. If he proves himself worthy of a better chance, he will be sure to get it. The thing for him to do, then, is to show that he can do Life business. This is the only thing he need concern himself about at the outset. He only asks a foothold—a chance to demonstrate that he has capacity for this work. If it is in him it will be sure to come out; and he will soon find his level and get as good a position somewhere as he deserves. Two lines in Addison's Cato may well be remembered:

"'Tis not in mortals to command success;
But we'll do more, Sempronius—we'll deserve it!"



4. PROMPT DELIVERY OF POLICIES.

THE delivery of policies should be made as soon as possible after they come into the hands of an agent. Delay may bring a change of mind on the part of an applicant. A large proportion of returned policies would have been taken if agents had promptly and personally attended to their business.

5. Renewals and Rejections.

HEN a payment is to be made upon a policy, it affords an opportunity for the agent to congratulate the assured upon his good investment; to inquire if he does not wish to increase the amount, and if he cannot name some of his friends who might desire to take out policies.

Where a party is rejected from want of sufficiently good health, it is well to ease over the disappointment as far as possible; to advise that he see the medical examiner some other time; and to express the hope that he will yet be able to forward a good application.

6. HELPING THE MESITATING.

You will come in contact with many men who never can decide to assure. They are convinced, and all but ready to act. But unless helped, they will never "cross the Rubicon." In such a case, get out your forms of proposal, ask for pen and ink, (or, better still, carry a portable ink-stand with you,) and commence filling up the form by asking the full name, etc., etc. An experienced agent remarks that you will find that nineteen men out of twenty will allow you to decide for them that which they would delay for months, or even years, if left to decide it for themselves. At the same time, with some men it will not do thus to assume that they are ready. You must wait their motion.

7. FILLING OUT APPLICATIONS.

READ carefully the directions printed on the margins of the application, or elsewhere, as to particulars, and write out the applications with extreme care, as this application is the basis of a contract upon which possibly widows and orphans may depend for their all. You have no right to peril it by haste or carelessness; or to subject the Company and yourself to delays and annoyances from the same cause.

In filling out the application, write replies to every question distinctly. Insert the full Christian name, both of the applicant and of the person whose life is to be assured.

The signatures must always be the full Christian names. All incomplete and incorrect applications will be returned to you.

8. Resign if Doing Nothing.

COMPLAINTS are often made by companies, that agents who do little or nothing do not throw up their commissions. It is but fair that an appointee either discharge the duties of his office, or vacate it in favor of another. Otherwise, important ground will be unoccupied, and the company will suffer harm from the impression which men get that it is doing no business.

A dead agency is worse than none. When a live man subsequently takes hold of it, he finds its antecedents a serious obstacle. He had a thousand times rather begin anew.

The moment, then, that the agent becomes satisfied that he cannot successfully fill the place, he should signify it to the Company.



ENLARGING THE BUSINESS.

1. WIDENING PRE'S FIELD.

PON hearing a minister complain that his "field was too narrow," a brother replied, "Then why don't you enlarge it?" Better advice could not have been had. The same counsel might with profit be given to many a man occupying a Life agency which he deems "too contracted." On that same field some other man might be reaping a splendid harvest.

It is all a mistake (we speak as a general rule) to imagine that nothing can be done in a given place because there are "too many companies

operating there," or "the people are pretty much all assured," or there is "too little money in circulation;" or something like it. In one sense, the more companies the better. The mind of the community will likely be stirred up to the matter of assurance, which is an important consideration.

The more people know of this subject the more they will like it. Life Assurance will one day be as common as fire insurance; and you may just as well think of exhausting or overdoing the one as the other. We had rather go into a community where there are a dozen companies, than where an agent had never been, and Life Assurance was wholly a new thing. In fine, no matter what the character of the field is, well directed effort will produce satisfactory results. It is not so much the field as the man.

2. STRIKING FOR LARGE POLICIES.

ANY agents err in not aiming high enough when soliciting policies. It is usually well to name a large sum, even if it be rejected. It will help to expand one's ideas, and secure him for a respectable amount.

And again, it is a great mistake to pass by the rich, and be always working at men with small means. "Nothing venture, nothing have." Try that man of independent means. Don't be afraid! If you secure him, it will make up for many failures. Remember that one policy of ten thousand dollars is worth ten policies of a thousand dollars.

Besides this, it gives standing to your company to identify with it those who are in affluent circumstances.

3. Depending on "Machinery."

It is a trite remark of some one, that "the best way to do a thing is to do it!" While some men are getting ready to work, and "operating" their machinery, others will step in and accomplish the same thing without anybody's knowing it. An English writer says: "there are two kinds of agents. Some of them mean well, yet they think they must have a very large amount of stationery, and plates on their doors, and boards on houses, and large bills to stick about the town, and they are constantly asking for something of this kind. On the other hand, there is another class of agents who do little of this sort of thing. They remind us very much of the owners of two barges which got aground near London Bridge. One of them got a large number of horses, and brought all their strength to bear upon one of the barges, and tore it to pieces; the

other watched for the tide, and when it rose seized the opportunity, and took it safely, with sails and helm, into harbor. Now, what we want agents to do is to seize opportunities, seek for them, and when they find them, not to make a great noise, but do the work right up." While one agent may be puffing his office in every newspaper in his neighborhood from year to year, the working agent is steadily and noiselessly accumulating a large business.

4. Editorial Notices.

A ND yet we would by no means despise helps and auxiliaries in getting business. One of these is local (and if possible editoral) notices in the papers. It is very rare that this cannot be brought about; if not directly, then through the influence of other parties. One good editorial notice is worth a year's advertisement in the business columns. By all means induce the editor to take a policy, if the thing is possible, so that he can say "We are assured in this Company."

5. Use of Office-Books, etc.

JUDICIOUS distributions of these is desirable.

If the Company is wholly unknown in the community, show-cards, circulars, office-books, annual state-

ments, &c., may be freely given away. In many cases, however, in getting an application, no reading matter will be serviceable. We know agents who, as a rule, just take the tables of the Company in their hands and go out and get business—very rarely using any other printed matter. But where one will "think about it," it is wise to give him something to read, especially if it explains and enforces the assurance of life. So far as documents of any kind are really effective, they are a cheap investment. And they should be put into the hands of those already assured, as well as the unassured. This will increase their confidence, and in many cases they will show them to their friends.

6. JNFLUENCE OF THE MINISTER.

IFE agents should cultivate the acquaintance of the clergy, and by every suitable means endeavor to secure their influence. In most cases a minister will give a note of introduction, or a general letter commendatory of the agent and his Company. Often, too, a pastor will furnish a list of the members of his parish most likely to assure.

It is of great importance to effect an assurance upon the minister's life. Where he is unable, or disinclined, some one of his parishioners may be induced to take up the matter and raise the premium, and make a *present* to the pastor of a policy. Suggest this to some one of the members.

7. SUNDAY-SCHOOL TEACHERS.

BECOMING associated with the Sunday-school will not only extend one's usefulness in general, but enhance his success as an agent. It gives him a standing in the community, introduces him to young men of enterprise and growing influence, and identifies him with the congregation and its leader.

8. PROFITING BY DEATHS OF ASSURED.

HERE a life falls in the community with an assurance upon it, especially if it is of great advantage to the surviving members of the family, particulars may be profitably obtained, and the circumstances commented upon. Perhaps the relatives and friends may be induced to assure.

9. Same of the Unassured.

ERY few communities do not furnish examples where a life policy upon the deceased parent would have been a God-send to the afflicted household. It is not only proper to refer to such cases, but an agent is derelict in duty if he does not interpret and apply such providences as a warning against the neglect of Life Assurance. Sudden deaths give especial point to such appeals.

10. NEW ATTENTION TO CANVASS-

THE memorandum book may now be profitably refilled with names of friends, and names of those whose acquaintance may be cultivated. It is ever to be borne in mind, that personal canvass is the one sure clue to a growing success. All other means put together will not amount to so much as the single matter of intelligent activity. Indeed, unless backed by activity they are of no avail. That which pays, and pays with compound interest, is the direct grapple of the agent's mind upon the individual minds of the community.

Write this down as an axiom: "Assurance will not come into my office; I must go out and invite it in; I must, I will, solicit, solicit, solicit!"

11. THE MOTIVE OF PATRONAGE.

SHREWD agent will make every business relation tell upon his assurance business. The merchant, the mechanic, the banker, the physician, the grocer, the tailor, the printer, may reasonably be solicited to take a policy on the consideration of your patronage. If approached in a delicate way, no man will think the less of you for suggesting this. It is a fair business transaction.

12. NEVER WITHOUT BLANK APPLI-CATIONS.

THE hunter does not go into the woods and fields without ammunition. Neither should the Life agent cross the threshold of his office without being in a condition to "produce the documents," in case they are wanted. The neglect of this simple precaution has lost many an

agent more than one application. While going for the gun the game fled! Be always ready to say, "Well, let us fix it right up now! There's no time like the present!"

13. RECOMMENDING NEW AGENTS.

It is expected of an agent to keep an eye out for stirring business-men, adapted to a Life agency, who might like to change their occupation. These he will recommend to the Home Office for appointment, in case they are wanted either in his own or some other field. If he meets with agents of other companies who desire to dissolve their present connection, it is proper to mention it; but it is not honorable to try to induce them to change companies.

14. PPERATING THROUGH "Bosses,"

In large business or manufacturing establishments, it is important to get the good-will of the principal head (and assure him if possible), and so obtain favorable access to those in his employ. Very often, also, the superintendent or foreman of a concern is a more useful friend than

even the principal. Or one of the clerks or common workmen may, by proper influences, become of very great advantage in introducing the agent to his associates in the shop or the warehouse.

15. Soliciting the "Intimate Friend."

THIS is a most favorable way of introducing the subject of assurance; and the fact that a particular acquaintance has obtained a life policy, will often be a sufficient inducement for him at least to look into the subject of assurance. At the same time, he will naturally think well of the company to which his friend has given the preference. When practicable, get those about to be assured to go with you to their friends, introducing you, and commending to them Life Assurance, and the company you represent. This has great weight.

16. Convincing the Wives.

FTENTIMES women are less favorable to Life Assurance than men. Many a wife absolutely opposes the husband's getting a policy. And others are indifferent

to it, and, at least, do not press the matter till it is accomplished. It will be well to remind such wives that multitudes of their number are suffering to-day from this indifference, or opposition, or, perhaps, foolish superstition; that multitudes will be sorry for it but once, and that is, always. At the same time, urge the tender motive of love to their children.

17. LOOKING AFTER THE NEWLY-MARRIED.

E lately heard a sensible newly-married husband say, that from the time of his marriage until he placed an endowment life-policy of \$5,000 in his desk, he had not drawn a free breath. He felt how totally destitute his wife would be, in case of his death; and he saw no way of meeting his obligation to provide for her support (which he had solemnly pledged himself to do), except by means of Life Assurance. When this was effected, he felt easy. Using such an example, an agent, cassing on the newly-married, may also suggest how admirable a present to a bride a handsome life-policy would be. It will be well to precede the call by sending documents, showing the impera-

tive duty of every married man to assure. Make the acquaintance of those about to marry, before the consummation of the event; this will render your chance a better one.

18. Making Each Assured a Helper.

If he be wise in enlarging his business, an agent will be particular to enlist in his interest, so far as he can, erery one who takes a policy. In some cases, a slight compensation may ensure effort in this direction. But in other cases the offer of this would have a contrary effect. Here is room for wisdom and good sense. But it is highly desirable that an agent have numerous influences around him silently operating to his advantage.

19. Applying to Those Already Assured.

ITH some agents it is enough to find that one is already assured. How much better to congratulate him, and ask, "Would you not like to increase the amount?" and if for life, propose an endowment policy.



ARGUMENTS IN URGING ASSURANCE.

RECISELY the motive to be urged in a given case, cannot, of course, with certainty, be specified. Each agent must choose and use his own special argument. We know agents who very seldom use more than one, e. g., that of an investment. Others make the endowment feature a specialty. A wise agent will soon see which motive is most effective, and in the main use that. Business arguments will, as a rule, effect far more than sentimental arguments. The argument that tells may, in many individual instances, be a very weak one in itself, but if it an-

swers the purpose, it is everything. The illustration used may be homely, but if it effects its object it is superior to the most elegant metaphor. Confine yourself to a few strong points, and always present them in words so clear that any one can understand them.

We enumerate a variety of considerations, all of which are fair and legitimate motives in urging to action.

1. Scripture and Duty.

CRIPTURE declares, "If any man provide not for his own, especially those of his own house, he hath denied the faith and is worse than an infidel." And this provision obviously should be made to extend (as it may by Life Assurance), beyond the possible fall of the parent's own life. It is not enough to feed his household daily while living. So far as he can do it, he is bound to see that a table is spread for them when he may no more sit beside it. Just then may they most need this provision.

2. JMMEDIATE PROVISION.

PROVISION for one's dependents should, obviously, be *immediate*. The old-fashioned slow way of "laying up something for a rainy day," has proved itself

(alas, too often), wholly defective. Death does not wait for these slow accumulations. Not one in ten thousand, in the old way, lays by a competence for his family.

3. It is Found Here.

IFE assurance is an immediate provision. It secures a fortune instantly. The moment a policy is made out and executed, that moment the family is secure against the worst of ills. You may die the next hour, but a fund beyond all question will come to their relief.

4. The Only Method Known.

A SSURANCE of life is the *only* immediate provision. In this respect it *stands alone*. Prof. E. Wright, of Massachusetts, truly remarks that "Life Assurance possesses exclusively the power of creating at once an adequate provision against the destitution of dependents in case of death." Therefore, no other mode of accumulation is equal to this.

5. Uncertainty of Life.

Refer to examples, and to the statistics of sudden deaths. Urge that one knows this—must admit it; and should act on it. Put the case thus: "The chance of your dying within the year is two per cent., while the chance that your dwelling will burn within the year is less than a quarter of one per cent. There are, therefore, Eight chances that you will die within a week to one that your house will burn within the same time; yet you will hasten on the wings of the wind to insure the latter, and fold your arms with perfect indifference to the former!"

6. Possibility of Sickness.

ENTION the possibility of sickness, making it impossible to get a policy. Specify cases. Urge immediate action lest it be lamented when it is too late. "When the cold shiver runs through the frame, and the fevered tongue, and the short cough appear, it is too late to rush to the assurance office and offer yourself for examination!"

7. FAMILY AFFECTION,

A FFECTION to one's family is a strong motive. Find out particulars as to the wife, or children, and appeal to the wish to please them and do them good. You may often appeal on the ground of love for a dear child. The father's heart is tender, though the man be made of stone. The appeal may run thus:

"Would you not at this moment make sure a patrimony to your wife, or child, if you could? The instrument is within your reach! It is a Life-Policy!"

8. A Social Phligation.

It is a political and social duty to assure. Refer to its influence upon social life; the solidity it imparts to all institutions; and the protection it affords to industry and labor. Besides this, no person has a right to expose his family to the necessity of public support. It is a wrong to the public. By this means, too, one can be in a condition to have his debts paid, which he is solemnly bound to do.

9. Its Beneficence.

There is a way to do good. Allude to the relief it pours so abundantly upon the bereaved and suffering, and to the countless benefits it scatters along the pathway of human life. Show that by this means pauperism and its frequent consequence, crime, are greatly lessened; and that genteel pauperism (the most cruel form in which the evil appears), can be entirely removed.

10. A MEANS OF SELF-PROTECTION.

IFE Assurance has two features:—beneficence and self-protection. As to the latter, it is found in an endowment policy: by which one secures a certain sum to be paid to himself at a given age, if he live to that age, or if he die earlier, to be paid when he dies, to his heirs. In this way provision is made for a time when one's energies fail, and he may need money rather than be called upon to pay it out, as on a life-policy. Said an old merchant who failed in 1861: "Had I taken an endowment policy

thirty years ago I should not have felt the premiums from year to year, and I should have saved something to support me in my old age, which I could do in no other way."

Urge that hundreds of our best business men are now practically showing their appreciation of this form of life assurance.

11. YARIETY OF USES.

THE uses and advantages of a life-policy may be presented as a motive. The case may be put thus:

"How convenient for an honest young man, for instance, to turn over a life-policy as security for money which he loans, and which he is sure to pay back IF HE LIVES. Creditors can assure the lives of their debtors, as a security for their claims. A man with incumbrances upon his property may assure to the amount of them, to secure their ready payment at the expiration of his term policy, or at his decease. A young man may raise money to complete his education, or to buy a stock of goods, or tools, or a farm, by assuring his life and assigning the policy as contingent security:" and the like.

12. A GOOD INVESTMENT.

TERY few investments are as profitable as this. Show that many wealthy men are going into Life Assurance merely because it is a good operation They say, "It is the best investment we can make: for in fact it combines the advantages of a Life Assurance, a Savings' Bank, and a safe Investment." Some of them are carrying policies for \$25,000, \$50,000, \$100,000; and one man is known to be assured to the amount of \$250,000. These are among our shrewdest business-men. Show, also, how many a valuable business has been sacrificed by the inability of a widow to wait until a fair price could be obtained, owing to ready money being required. If a merchant, show how valuable a policy becomes at a time of pressure as collateral security. And how, in a long lifetime, it becomes an investment paying a reasonable percentage for capital. And, also, how he can provide for his old age and for his family at the same time, by taking an endowment poli-If he is a member of a firm, point out the value of a provision paid from the business funds on the first of two or three lives, thus securing a safe portion for the widow of the first deceased partner without crippling the concern for those who shall be the survivors.

13. INCREASES CREDIT.

T increases one's credit and adds to his business reputation. Reputation is money; and it is a mark of foresight, large-mindedness, and economy to assure. A merchant once advertised for a clerk. Out of two hundred applicants for the place, he was influenced in favor of a particular one by the young man's statement that he had kept a life-policy in force for five years.

14. PERSONAL ADVANTAGE.

SHOW that it develops the amiable and generous traits of character; accustoms a man to think for others; induces habits of industry, economy, and accumulation; and, by relieving the mind from anxiety and over-exertion, promotes health and longevity. And then, what a comfort in "the last of earth." How soothing and sustaining the reflection that an ample life-policy will insure the bereaved family against want. Well has a high authority remarked, that, if we gauge the suffering of one manly heart, for that single hour when the films of death are curtaining his loved ones out of sight unprovided for, and remember how many

such agonies Life Assurance has prevented, putting happy and hopeful farewells in their stead, after prolonging life, perhaps, by lightening care, we shall be ready to justify the companies in any necessary expense.

15. JOY TO THE HOUSEHOLD.

EXPLAIN how the whole family feels the sweet influence of Life Assurance. The daughter will not have to be kept from school to sew for a living. The son can get an education, or be set up in business. And even the group of little ones are more blithesome because papa has had recourse to the philosopher's stone that creates a capital in an instant. The wife rejoices in the calm reflection that God has opened to her and the children an effectual door of relief in case their natural protector and support is snatched away. And the husband feels that a load is off his mind. He is a new man. He has done his duty and has a right to trust God and be at peace.

16. A DICTATE OF PRUDENCE.

SIMPLE prudence demands it. Doubtless one reason why mortality is regulated by a law, is, that we might provide against some of the worst calamities attending it.

It is simply wicked to disregard such provisions; just as if sewerage, disinfective agencies, vaccination, lightning-rods, &c., were not used to prevent fevers, cholera, small-pox and destruction by lightning. It were neglecting a providential means of security. So here. And the time is sure to come, if it is not here already, when a man will be deemed just as imprudent to leave his life unassured as to neglect insuring his property. And just as severe censure will be visited in either case.

17. FINAL APPEAL.

HEN you have convinced the judgment, gather up all your powers to move the will. Grapple on to the man. Throw your soul into his soul, your will into his will. Kindly, but firmly, make him answer to his own conscience such questions as these:

"HAVE I DONE MY DUTY TO MY FAMILY? Have I done it to the FULL EXTENT OF MY PRESENT ABILITY? If I were to die to-night, would those who are dear to me be safe from the pangs of want? Would my children have a comfortable home and means of education? Would my wife be independent of the cold charities of the world? Would my estate pay my debts and leave a competency to my family?

If not, must I not obtain a life-policy before I sleep, and so substitute the Certainty of a snug patrimony for the uncertainty of the continuance of my life?"

If you assure one out of ten of those thus urged, you will do well, and have no reason to be discouraged; and, as to the remaining nine, you may have started in their minds new ideas on the subject, and some of them may eventually give you their applications. Therefore do not be disheartened by lack of immediate success.





HOW TO MEET OBJECTIONS.

F an objection is not started, do not make reference to it. Never anticipate difficulties by bringing them forward yourself; but be ready at every point fairly to meet them when presented We can only hint how this may be done, in a number of cases,

1. Indebtedness.

HEN indebtedness is urged as an objection, show its fallacy, e. g., thus: "If you die with debts unpaid, where will your family be?

If you assure and die, your creditors may be paid at once. Did you ever hear the assignce of a bankrupt blame him for spending money for a Life Assurance Policy? *Never*."

2. WELL OFF.

Fone says he is well off, show that the rich often become poor. Mention cases that the man has known. Also urge that at his death the family would need cash in hand. Thus: "It might take twelve, eighteen, or twenty-four months for your executors to settle up your estate. Were you to die now, would they have enough READY CASH left them to live in the style they now live in, and meet the extra expenses incident to your decease? You think not. Then procure a generous life-policy, which would be IMMEDIATELY CONVERTIBLE INTO MONEY."

3. Religious Scruples.

SOMETIMES religious scruples exist. Show that religion does not forbid, but enjoins, prudence. Allude to the practice of *fire* insurance. Or, put the case thus: "Who is most likely to worry about the fate of his wife and children—a man with a few thousands of dollars laid up for them, or one who has made no provision for them?"

Rev. Dr. Cumming, of London, says: "The assurance of life is one of the most christian things that I know; for what is it? It is taking the load that would crush one family, and spreading it over twenty thousand families; so that a mere drop lights upon each, instead of the overwhelming torrent falling upon one. It seems to me a beautiful illustration of bearing one another's burdens. And, therefore, let every young man entering upon life, every head of a family, whether high or low, set his house in order so far as to assure his life."

4. FEARS AS TO SAFETY.

HERE doubt exists as to the safety of Assurance, show that Life companies have stood secure; that they cannot, if properly managed, fail; and that such companies thrive even upon the ruins of other financial concerns: for, by the mishaps of others, money is increased in value, and it is in money that these institutions deal.

Add, also, that in times of convulsions men rush into Life Assurance, thereby increasing the business of such institutions, and making it profitable. (See, also, page 24.)

5. Expensiveness.

Fits expensiveness is talked of, show that it is not an expense, but an accumulation. It is neither more nor less than an absolutely sure investment of whatever you can, by a well-considered economy, spare, in order to procure, upon the best terms, a sufficiency to support your family, or your own old age when it has grown helpless. But at any rate how little does it cost! Ten cents a day amounts in one year to thirty-six dollars and fifty cents. This sum would secure a life-policy for a man aged twenty-three in the sum of \$2,000; and if he should live to a good age the amount to be paid yearly, if anything, would be very small, or the amount and value of the policy would be largely increased. And add, "Will you not use up your income anyhow? so that what you put in here is so much gained."

6. Making Money Fast.

HEN one urges that he is vigorous and making money, insist that from the superfluity of the present he should provide for the possible imbecility and scarcity of the future; as Joseph directed Pharaoh to lay up from the seven years of plenty against the seven years of famine.

J. Assuring One's Self.

If one says, "I can assure myself by taking the risk as cheaply as a company can do it for me," show that his may not be an average life as to duration; that the rate of mortality is only certain with respect to a large number of persons.

8. THE SAVINGS BANK.

HEN the objection is that it is better to deposit small moneys in the savings bank, meet it thus: Even if you live, it were better to put them into a Life-Policy. Suppose a person to deposit \$1,000 with a Mutual Life Assurance Company on the accumulative principle (that is, to purchase a fixed policy payable at death), and \$1,000 with a good and reponsible Savings Bank. Mark the result running through the twenty-five intervening years of a person's life, from 25 to 50, as shown in this Table:

If, then, with equal security to the depositor, Life Assurance on the Accumulative principle pays a much larger sum to the family than would be paid by the accumulations of a Savings Bank, ought not this mode of investment to be preferred?

9. Using Funds in Business.

DOES the objector assume that he can better use his money in his business? Put the case thus: "Suppose your profits to be twenty-five per cent., or even double that:—no matter what your prosperity. Here is a trifling periodical payment which covers an enormous risk. It covers the risk of your dying in the interim. Can your business do this, or anything approaching it? Suppose, to take the strongest case, you put \$50 in your business, and at the year's end it is likely to become \$250. Yet, even then you had better put your fifty dollars in an Assurance company; for, should you die before the year's end, you would thereby have secured \$2,000 for your family. If you live, so much the better; thank God, and go on again, not forgetting to pay another premium in due time, lest during another year you should not be so fortunate."

10. No FAMILY TIES.

LTHOUGH one has no family, and may not have one, show that money may be needed in advanced age, and so explain an endowment or an annuity policy. Also, that some relative may be benefited by a policy; or that in this way he might like to will something to a benevolent or educational institution. LIBRAR

11. JNABILITY TO CONTINUEERSITY OF

HERE one fears he cannot continue payments, and so may lose all that is put in, reply, "Have you not had the value of your money in the risk, as in a fire-policy?" And better, "Non-forfeiture prevents the possibility of losing what is put in:" (and so explain this beautiful arrangement.)

12. SOME OTHER TIME.

HEN one says, "I will think of it," it is well to remind him that procrastination is not only "the thief of time," but the murderer of opportunity: that many a family is doomed to want from a similar delay of but a day or an hour; (refer to examples in American Manual of Life Assurance:) that a man was lately found dead with a blank application in his pocket, which he intended to fill out "to-morrow:" that this is a matter of the first importance, and one usually attends to important things first: that he would not leave his house, store, barn, or shop uninsured a day: and, finally, that to-morrow he may not be assurable, from possible indisposition, accident, or death. Therefore,

"Shun delays; they breed remorse;
Take thy time while time is lent thee.
Creeping snails have weakest force;
Fly their fault, lest thou repent thee.
Good is best when soonest wrought,
Lingering labors come to nought."

For answers to other objections (and these more fully), see American Manual of Life Assurance.

If one will not be persuaded to assure, try to find where the *sticking-point* is, and remove the difficulty by arguing the case out clearly; then, *urge to immediate action*.



CONVENIENT TABLES.

SIMPLE INTEREST TABLE.

showing the Interest at 7 per cent., for one year, payable in advance, on any Sum from One Dollar to One Hundred Dollars.

Dol.	Int.	Dol.	Int.	Dol.	Int.	Dol.	Int.	Dol.	Int.
\$1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	\$.07 .13 .20 .26 .33 .39 .46 .52 .29 .65 .72 .79 .85 .92 .92 .98 1.05 1.11	\$21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38	\$1.38 1.44 1.51 1.64 1.77 1.83 1.90 1.97 2.03 2.16 2.23 2.29 2.42 2.49	\$41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	\$2.69 2.75 2.82 2.88 2.95 3.01 3.08 3.14 3.21 3.34 3.41 3.47 3.54 3.67 3.73 3.86	\$61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77	\$4.00 4.06 4.13 4.19 4.26 4.32 4.45 4.52 4.65 4.72 4.65 4.72 4.85 4.91 4.98 5.04 5.11	\$81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98	\$5.31 5.37 5.44 5.59 5.57 5.63 5.76 5.83 5.96 6.03 6.03 6.09 6.16 6.22 6.29 6.35 6.42

COMPOUND INTEREST TABLES-(over.)

Table I on the following pages shows the result of Compound Interest on the Deposit of One Dollar, for any number of years not exceding 100, at various rates. Table II shows the result of compounding an annual payment of One Dollar at the beginning of each year, for a term of years not exceeding 100. By the use of this Table one can ascertain what a given annual premium paid for any number of successive years will amount to at say six per cent. Multiply the annual premium by the sum opposite the number of years, under 6 per cent., in Table 11; this will give the desired result. The same rule applies in relation to Endowment Premiums. To ascertain what rate of interest has been realized by the payment in full of an annual premium for a term of years, divide the total amount of Policy with additions by the annual premium. Then find, in Table II, the number corresponding nearest to the quotient, in the line opposite the number of years the premiums have been paid. The rate of interest at the head of the column containing such number will express approximately the rate realized on the investment. By the combined use of Tables I and II, Results of Five, Ten, or Fifteen Payment Policies may be calculated for any term of years.

1. COMPOUND INTEREST.

Showing the Amount of \$1 improved at Compound Interest, for any number of years not exceeding 100,

Years.	4 per Ct.	41/2 per Ct.	5 per Ct.	6 per Ct.	7 per Ct.	8 per Ct.
1	1,040000	1,045000	1.05000	1.060000	1.070000	1.080000
2	1,081600	1,092025	1.102500	1.123600	1.144900	1.166400
3	1,124864	1,141166	1.157625	1.191016	1.225043	1.259712
4	1,169859	1,192519	1.215506	1.262477	1.310796	1.360480
5	1,216653	1,246182	1.276282	1.338226	1.402552	1.469328
6 7 8 9	1.265319 1.315932 1.368569 1.423312 1.480244	1.302260 2.360862 1.422101 1.486095 1.552969	1.340096 1.407100 1.477455 1.551328 1.628895	1.418519 1.503630 1.593848 1.689479 1.790843	1.500730 1.605781 1.718186 1.838459 1.967151	1.586874 1.713824 1.850930 1.999005 2.158925
11	1.539454	1.622853	1.710339	1.898299	2.104852	2.331639
12	1.601032	1.695881	1.795856	2.012196	2.252192	2.518170
13	1.665074	1.772196	1.885649	2.132928	2.409845	2 719624
14	1.731676	1.851945	1.979932	2.260904	2.578534	2.937194
15	1.800944	1.935282	2.078928	2.396558	2.759032	3.172169
16 17 18 19	1.872981 1.947901 2.025817 2.106849 2.191123	2.022370 2.113377 2.208479 2.307860 2.411714	2.182875 2.292018 2.406619 2.526950 2.653298	2.540352 2.692773 2.854339 3.025600 3.207135	2.952164 3.158815 3.379932 3.616528 3.869684	3.425943 3.700018 3.996020 4.315701 4.660957
21	2.278768	2.520241	2.785963	3.399564	4.140562	5.033834
22	2.369919	2.633652	2.925261	3.603537	4.430402	5.436540
23	2.464716	2.752166	3.071524	3.819750	4.740530	5.871464
24	2.563303	2.876014	3.225100	4.048935	5.072367	6.341181
25	2.665836	3.005434	3.386355	4.291871	5.427433	6.848479
26	2.772470	3.140679	3.555673	4.549483	5.807353	7.396353
27	2.883369	3.282010	3.733456	4.822346	6.213868	7.988061
28	2.998703	3.429700	3.920129	5.111687	6.648838	8.627106
29	3.118651	3.584036	4.116136	5.418388	7.114257	9.317273
30	3.243398	3.745318	4.321942	5.743491	7.612255	10.062657
31 32 33 34 35	3.373133 3.508059 3.648381 3.794316 3.946089	3.913857 4.089981 4.274030 4.466362 4.667348	4.538039 4.764941 5.003189 5.253348 5.516015	6.088101 6.453387 6.840590 7 251025 7.686087	8.145113 8.715271 9.325340 9.978114 10.676581	10.867669 11.73708 12.676050 13.690134
36	4.103933	4.877378	5.791816	8.147252	11.423942	15.968172
37	4.268090	5.096860	6.081407	8.636087	12.223618	17.245626
38	4.438813	5.326219	6.385477	9.154252	13.079271	18.625276
39	4.616366	5.565899	6.704751	9.703507	13.994820	20.115298
40	4.801021	5.816365	7.039989	10.285718	14.974458	21.724522
41	4.993061	6.078101	7.391988	10.902861	16.022670	23.46248
42	5.192784	6.351615	7.761588	11.557033	17.144257	25.33948
43	5.400495	6.637438	8.149667	12.250455	18.344355	27.36664
44	5.616515	6.936123	8.557150	12.985482	19.628460	29.55597
45	5.841176	7.248248	8.985008	13.764611	21.002452	31.92044
46	6.074823	7.574420	9.434258	14.590487	22.472623	34.47408
47	6.317816	7.915268	9.905971	15.465917	24.045707	37.23201
48	6.570528	8.271456	10.401270	16.393872	25.728907	40.21057
49	6.833349	8.643671	10.921333	17.377504	27 529930	43.42741
50	7.106683	9.032636	11.467400	18.420154	29.457025	46.90161

COMPOUND INTEREST, I.—(CONTINUED.)

Showing the Amount of \$1 improved at Compound Interest, for any number of years not exceeding 100.

		1				
Years.	4 per Ct.	$4\frac{1}{2}$ per Ct.	5 per Ct.	6 per Ct.	7 per Ct.	8 per Ct.
51 52	7.390951	9.439105	12.040770	19.525364	31.519017 33.725348	50.653742 54.706041
53 54 55	7.994052 8.313814 8.646367	10.307739 10.771587 11.256308	13.274949 13.938696 14.635631	21.938698 23.255020 24.650322	36.086122 38.612151 41.315001	59.082524 63.809126 68.913856
56 57 58 59	8.992222 9.351910 9.725987 10.115026	11.762842 12.292170 12.845318 13.423357	15.367412 16.135783 16.942572 17.789701 18.679186	26.129341 27.697101 29.358927 31.120463 32.987691	44.207052 47.301545 50.612653 54.155539 57.946427	74.426965 80.381122 86.811612 93.756540 101.257064
61 62 63 64	10.519527 10.940413 11.378029 11.833150 12.306476	14.027408 14.658641 15.318280 16.007603 16.727945	19.613145 20.593802 21.623493 22.704667	34.966952 37.064969 39.288868 41-646200	62.002677 66.342864 70-986865 75.955945	109.357629 118.106239 127.554738 137.759117
65 66 67 68 69	12.798735 13.310685 13.843112 14.396836 14.972710 15.571618	17.480702 18.267334 19.089364 19.948385 20.846063 21.784136	23-839901 25.031896 26.283490 27.597665 28.977548 30.426426	44. 144972 46. 793670 49. 601290 52. 577368 55. 732010 59-075930	81.272861 86.961962 93.049299 99.562750 106.532142 113.989392	148.779847 160.682234 173.536813 187.419758 202.413339 218.606406
71 72 73 74 75	16.194483 16.842262 17.515953 18.216591 18.945255	22.764422 23.788821 24.859318 25.977987 27.146996	31.947747 33.545134 45.222391 36.983510 38.832686	62.620486 66.377415 70.360378 74.582001 79.056921	121.968650 130.506455 139.641907 149.416840 159.876019	236.094918 254.982512 275.381113 297.411602 321.204530
76 77 78 79 80	19.703065 20.491187 21.310835 22.163268 23.049799	28.368611 29.645199 30.979233 32.373298 33.830096	40.774320 42.813036 44.953688 47.201372 49.561441	83.800336 88.828356 94.158058 99.807541 105.795993	171.067341 183.042054 195.854998 209.564848 224.234388	346.900892 374.652964 404.625201 436.995217 471.954834
81 82 83 84 85	23.971791 24.930663 25.927889 26.965005 28.043605	35.352451 36.943311 38.605760 40.343019 42.158455	52.039513 54.641489 57.373563 60.242241 63.254353	112.143753 118.872378 126.004721 133.565004 141.578904	239.930795 256.725950 274.696767 293.925541 314.500328	509.711221 550.488119 594.527168 642.089342 693.456489
86 87 88 89	29.165349 30.331963 31.545242 32.807051 34.119333	44.055586 46.038087 48.109801 50.274742 52.537105	96.417071 69.737925 73.224821 76.886062 80.730365	150.073639 159.078057 168.622740 178.740105 189.464511	336.515351 360.071426 385.276426 412.245776 441.102980	748.933008 808.847649 873.555461 943.439897 1018.91509
91 92 93 94 95	35.484107 36.903471 38.379610 39.914794 41.511386	54-901275 57-371832 59-953565 62-651475 65-470792	84.766883 89.005227 93.455489 98.128263 103.034676	200.832382 212.882325 225.655264 239.194580 253.546255	471.980188 505.018802 540.370118 578.196026 618.669748	1100.42830 1188.46256 1283.53956 1386.22273 1497.12055
96 97 98 99	43.171841 44.898715 46.694664 48.562450 50.504948	68.416977 71.495741 74.7.3050 78.075137 81.588518	108.186410 113.595731 119.275517 125.239293 131.501258	268.759030 284.884572 301.977646 320.096305 339.302084	661.976630 708.314994 757.897044 810.949837 867.716326	1616.89019 1746.24141 1885.94072 2036.81598 2199.76126

COMPOUND INTEREST, II.

The amount of \$1 per annum in any number of Years.

Years.	4 per Cent.	4½ per Cent.	5 per Cent.	6 per Cent
1	1.000000	1.000000	1.000000	1,000000
2	2.040000	2.045000	2.050000	2,060000
3	3.121600	3.137025	3.152500	3,183600
4	4.246464	4.278191	4.310125	4,374616
5	5.416323	5.470710	5.525631	5,637093
6 7 8 9	6.632975 7.898294 9.214226 10.582795 12.006107	6.716892 8.019152 9.380014 10.802114 12.288209	6.801913 8.142008 9.549109 11.026564 12.577893	6,975319 8,393838 9,897468 11,491316 13,180795
11	13.486351	13.841179	14.206787	14.971643
12	15.025805	15.464032	15.917127	16.869941
13	16.626838	17.159913	17.712983	18.882138
14	18.291911	18.932109	19.598632	21.015066
15	20.023588	20.784054	21.578564	23.275970
16	21.824531	22.719337	23.657492	25.672528
17	23.697512	24.741707	25.840366	28.212886
18	25.645413	26.855084	28.132385	30.905653
19	27.671229	29.063562	30.539004	33.759992
20	29.778079	31.371423	33.065954	36.785591
21	31.969202	33.783137	35.719252	39.992727
22	34.247970	36.303378	38.505214	43.392290
23	36.617889	38.937030	41.430475	46.995828
24	39.082604	41.689196	44.501999	50.815577
25	41.645908	44.565210	47.727099	54.864512
26	44.311745	47.57°645	51.113454	59.156383
27	47.084214	50.711324	54.669126	63.705766
28	49.967583	53.993333	58.402583	68.528112
29	52.966286	57.423°33	62.322712	73.639798
30	56.084938	61.007070	66.438848	79.058186
31	59.328335	64.752388	70.760790	84.801677
32	62.701469	68.666245	75.298829	90.889778
33	66.209527	72.756226	80.063771	97.343165
34	69.857909	77.030256	85.066959	104.184755
35	73.652225	81.496618	90.320307	111.434780
36	77.598314	86.163966	95.836323	119.120867
37	81.702246	91.041344	101.628139	127.268119
38	85.970336	96.138205	107.709546	135.904206
39	90.409150	101.464424	114.095023	145.058458
40	95.025516	107.030323	120.799774	154.761966
41	99.826536	112.846688	127.839763	165.047684
42	104.819598	118.924789	135.231751	175.950545
43	110.012382	125.276404	142.993339	187.507577
44	115.412877	131.913842	151.143006	199.758032
45	121.029392	138.849965	159.700156	212.743514
46	126,870568	146.098214	168,685164	226.508125
47	132,945390	153.672633	178,119422	241.098612
48	139,263206	161.587902	188,025393	256.564529
49	145,833734	169.859357	199,426663	272.958401

COMPOUND INTEREST, II.—(CONTINUED.)

The amount of \$1 per annum in any number of Years.

Years.	4 per Cent.	4 ¹ ∕ ₂ per Cent.	5 per Cent.	6 per Cent.
51	159.773767	187.535665	220.815395	308.756059
52	167.164718	196.974769	232.856165	328.281422
53	174.851306	206.838634	245.498974	348.978308
54	182.845359	217.146373	258.773922	370.917006
55	191.159173	227.917959	272.712618	394.172027
56	199.805540	.239.174268	287.348249	418.822348
57	208.797762	250.937110	302.715662	444.951689
58	218.149672	263.229280	318.851445	472.648790
59	227.875659	276.074597	335.794017	502.007718
60	237.990685	289.497954	353.583718	533.128181
61	248.510313	303.525362	372.262904	566.115872
62	259.450725	318.184003	391.876049	601.082824
63	270.828754	333.502283	412.469851	638.147793
64	282.661904	349.509886	434.093344	677.436661
65	294.968381	366.237831	456.798011	719.082861
66	307.767116	383.718533	480.637912	763.227832
67	321.0748c0	401.985867	505.669807	810.021502
68	334.920912	421.075231	531.953298	859.622792
69	349.317749	441.023617	559.550963	912.200160
70	364.290459	461.869680	588.528511	967.932170
71	379.862077	483.653815	618.954936	1027,008100
72	396.956560	506.418237	650.902683	1089,628586
73	412.898823	530.207057	684.447817	1156,006301
74	430.414776	555.066375	719.670208	1226,366679
75	448.631367	581.044362	756.653718	1300,948680
76	467.576621	608.191358	795.486404	1380.005601
77	487.279686	636.559969	836.260725	1463.805937
78	507.770874	666.205168	879.073761	1552.634293
79	529.081708	697.184401	924.027449	1646.792350
80	551.244977	729.557699	971.228821	1746.599891
81	574.294776	763.387795	1020.790262	1852.395885
82	598.266567	798.740246	1072.829775	1964.539638
83	623.197230	835.683557	1127.471264	2083.412016
84	649.125119	874.289317	1184.844827	2209.416737
85	676.090124	914.632336	1245.087069	2342.981741
86 87 83 89	704.133728 733.299078 763.631041 795.176282 827.983334	956.790791 1000 846377 1046.884464 1094.994265 1145.269007	1308.341422 1374.758493 1444.496418 1517.721239 1594.607301	2484.560646 2634.634285 2793.712342 2962.335082 3141.075187
91	862.102667	1197.806112	1675.337666	3330.539698
92	897.586774	1252.707387	1760.104549	3531.372080
93	934.490245	1310.079219	1849.109777	3744.254405
94	972.869854	1370.032784	1942.565265	3969.909669
95	1012.784649	1432.684259	2040.693529	4209.104250
96	1054.296035	1498.155051	2143.728205	4,462.650505
97	1097.467876	1566.572028	2251.914615	4731.409535
98	1142.366591	1638.067770	2365.510346	5016.294107
99	1189.061255	1712.780819	2484.785864	5318.271753

COMPOUND INTEREST, II.—(CONTINUED.)

The amount of \$1 per annum in any number of years.

Years.	7 per Cent.	8 per Cent.	9 per Cent.	19 per Cent.
1	1.000000	1.000000	1,000000	1,000000
2 3 4 5	2.070000 3.214900 4.439943 5.750739	3.246400 4.506112 5.866601	3.278100 4.573129 5.984711	3.310000 4.641000 6.105100
6 7 8	7.153291 8.654c21 10.259803	7.335929 8.922803 10.636628 12.487558	7.523335 9.200435 11.028474 13.021036	7.715610 9.487171 11.435888 13.579477
9	11.977989	14.486562 16.645487	15.192930	18.53116
11 12 13 14	15.783599 17.888451 20.140643 22.550488 25.129022	18.977126 21.495297 24.214920 27.152114	20.140720 22.953385 26.019189 29.360916	21.38428 24.52271 27.97498 31.77248
15 16 17 18	27.888054 30.840217 33.999033 37.378965	30.324283 33.750226 37.450244 41.446263 45.761964	33.003399 36.973705 41.301338 46.018458 51.160120	35.94973 40.54470 45.59917 51.15909 57.27499
20 21 22 23 24 25	40.995492 44.865177 49.005739 53.436141 58.176671 63,249038	50.422921 55.456755 60.893296 66.764759 73.105940	56.764530 62.873338 69.531939 76.789813 84.700896	64.00249 71.40274 79.54302 88.49732 98.34705
26 27 28 29	68.676470 74.483823 80.697691 87.346529 94.460786	79.954415 87.350768 95.338830 103.965936 113.283211	93.323977 102.723135 112.968217 124.135356 136.307539	109.18176 121.09994 134.20993 148.63093 164.49402
31 32 33 34 35	102.07304I 110.218154 118.933425 128.258765 138.236878	123.345868 134.213537 145.950620 158.626670 172.316804	149.575217 164.036987 179.800315 196.982344 215.710755	181.94342 201.13776 222.25154 245.47660 271.02436
36 37 38 39 40	148.913460 160.337402 172.561020 185.640292 199.635112	187.102148 203.070320 220.315945 238.941221 259.056519	236.124723 258.375948 282.629783 309.066463 337.882445	299.12680 330.0394 364.0434 401.4477 442.2925
41 42 43 44 45	214.609570 230.632240 247.776496 266.120851 285.749311	280.781040 304.243523 329.583005 356.949646 386.505617	369.291865 403.528133 440.845665 481.521775 525.858734	487.8518 537.6369 592.4006 652.6407 718.9048
46 47 48 49 50	306.751763 329.224386 353.270093 378.999000 406.528929	418.426067 452.900152 490.132164 530.342737 573.770156	574.186021 626.862762 684.280411 746.865648 815.083556	791.7953 871.9748 960.1723 1057.1895 1163.9085

COMPOUND INTEREST, II.—(CONTINUED.)

The amount of \$1 per annum in any number of years.

	1			
Years.	7 per Cent.	8 per Cent.	9 per Cent.	10 per Cent.
51	435.985955	620.671769	889.44.070	1281,299382
52	467.504971	671.325510	970.490773	1410,429320
53	501.230319	726.031551	1058.834943	1552,472252
54	537.316442	785.114075	1155.130088	1708,719477
55	575.928593	848.923201	1260.091796	1880,591425
56	617.243594	917.837058	1374.50057	2069.650567
57	661.450646	992.264022	1499.205063	2277.615624
58	708.752191	1072.645144	1635.133518	2506.377186
59	759.364844	1159.456755	1783.295535	2758.014905
60	813.520383	1253.213296	1944.792133	3034.816395
61	871.466810	1354.470360	2120.823425	3339.298035
62	933.469487	1463.827988	2312.697533	3674.227838
63	999.812351	1581.934227	2521.840311	4042.650622
64	1070.799216	1709.488966	2749.805939	4447.915685
65	1146.755161	1847.248083	2998.288474	4893.707253
66	1228.028022	1996.027929	3269.134436	5384.077978
67	1314.989983	2156.710164	3564.356535	5923.485776
68	1408.039282	2330.246977	3886.148624	6516.834354
69	1507.602032	2517.666735	4236.902000	7169.517789
70	1614.134174	2720.080074	4619.223180	7887.469568
71	1728.123566	2938.686480	5035.953266	8677.216525
72	1850.092216	3174.781398	5490.189060	9545.938177
73	1980.598671	3429.763910	5985.306075	10501.531995
74	2120.240578	3705.145023	6524.983622	11552.685195
75	2269.657419	4002.550624	7113.232148	12708.953714
76	2429.533438	4323.761154	7754.423041	13980.849085
77	2600.600779	4670.662047	8453.321115	15379.933994
78	2783.642833	5045.315011	9215.120015	16918.927393
79	2979.497831	5449.940211	10045.480817	18611.820133
80	3189.062680	5886.935428	10950.574090	20474.002146
81	3413.297067	6358.890263	11937.125758	22522.402360
82	3653.227862	6868.601484	13012.467077	24775.642596
83	3909.953812	7419.089602	14184.589114	27254.206856
84	4184.650579	8013.616770	15462.202134	29980.627542
85	4478.576120	8655.706112	16854.800326	32979.690296
86 87 88 89	4793.076448 5129.591799 5489.663225 5874.939651 6287.185427	9349.162601 10098.095609 10906.943258 11780.498718 12723.938616	18372.732355 20027.278267 21830.733311 23796.499309 25939.184247	36278.659326 39907.525258 43899.277784 48290.205562 53120.226119
91	6728.288407	13742.853705	28274.710829	58433.248730
92	7200.268595	14843.282002	30826.434804	64277.573603
93	7705.287397	16031.744562	33595.273936	70706.330964
94	8245.657515	17315.284127	36619.848590	77777.964060
95	8823.853541	18701.506857	39916.634964	85556.760466
96 97 98 90	9442.523288 10104.499919 10812.814913 11570.711957 12381.661794	20198.627405 21815.517598 23561.759006 25447.699726 27484.515704	43510.132110 47427.044000 51696.477960 56350.160977 61422.675465	94113.436513 103525.780164 113879.358180 125268.293998 137796.123398

STANDARD MORTALITY TABLES.

DESCRIPTION.*

No. 1.—Halley's Breslau Table.

This Table was deduced by the celebrated Astronomer Edmund Halley, from a series of life registers kept by Dr. Neumann in the city of Breslau in Silesia during the years 1687–91, and was the first Life Table which had any pretensions to accuracy. It was, however, regarded as inapplicable to English lives, and has, consequently, never been used by English companies. By arranging the numbers in the second column of this Table, Dr. Halley, all unconsciously, laid the foundation of the science of life contingencies.

No. 2.—PRICE'S LONDON TABLE.

This Table was arranged by Dr. RICHARD PRICE from the bills of mortality recorded in London during the years 1759–1768. It gives a high rate of mortality, and has not been used in the business of Life Assurance.

No. 3.—Price's Swedish Table.

This was the first National Life Table ever made, and was composed by the eminent Statistician Dr. RICHARD PRICE, from data obtained by M. WARGENTIN, of Stockholm, from seven different enumerations of the whole population of the Kingdom of Sweden, each repeated at the

^{*} For the purpose of securing absolute accuracy, the tables which follow (with the descriptive matter) are those carefully collated and published in the Insurance Reports of the State of New York.

end of three years, viz., in 1757, 1760, 1763, 1766, 1769, 1772, and 1775. It is commended for its general accuracy, but, owing apparently to national preferences, has not been used in England.

No. 4.—DEPARCIEUX'S FRENCH TABLE.

This Table was calculated by M. Deparcieux from the lists kept of the nominees of the Tontines of Paris and from the records of the deaths of Parisian annuitants from 1696 to 1742. It has been well approved as giving a near approximation to the expectation of assured lives.

The results of M. Deparcieux's calculations were afterward verified by comparison with the mortuary registers of several religious houses of both sexes in France.

This Table is referred to by Francis Bally in his Treatise upon the Doctrine of Annuities and Assurances (p. 14), published in 1813, as particularly fitted to form a proper basis for determining the value of annuities.

No. 5.—PRICE'S NORTHAMPTON TABLE.

This Table was formed by Dr. RICHARD PRICE from registers kept in the Parish of All-Saints in the town of Northampton, England, during the years 1735 to 1780. Although exceedingly unjust in giving a too high rate of mortality, particularly for the younger and middle ages, it was the first Life Table brought into use as a basis for the computation of Life premiums, having been adopted by the Equitable on its establishment in the year 1762. The Northampton Table long continued in much favor with the companies, as insuring an abundantly safe rate of premium; so much so, indeed, as to secure a higer profit, with-

out loading, than is obtained under many other Tables even with the addition of a loading of 20 or 30 per cent. This Table is still used by a majority of the old Life Offices in England as the basis for their rates of premium. In making valuations, however, the results are generally checked by calculations on the Carlisle or some other modern Table.

No. 6.—MILNE'S CARLISLE TABLE.

This Table was formed by the eminent Actuary Joshua Milne, from the observations of Dr. Heysham on the mortality of Carlisle, England, for the years 1778–87. Though somewhat defective in graduation, it is far more satisfactory than the Northampton Table in its approach to accuracy; for which reason it is extensively used in England and very generally in this country.

No. 7.—Davies's Equitable Table.

Constructed by the distinguished Actuary Griffith Davies, of London, and revised by Mr. Morgan in 1834. This was the first Table based upon the records of assured lives, being the experience of the Equitable Society from its foundation in 1762 to 1829.

No. 8.—Actuaries' or Combined Experience Table.

This Table is based upon the recorded experience of seventeen Life Companies in England, and was deduced from 62,537 assurances, under the superintendence of a committee of accomplished actuaries. The Table was published by Actuary Jenkin Jones in 1843, and furnishes a very accurate graduation of assured lives.

No. 9.—Quetelet's Belgian Table.

This Table was compiled and published in 1856 by the distinguished philosopher Adolphe Quetelet, of Brussels. It shows a higher rate of mortality than the English Tables. In the form here presented, the Table gives the combined decrement and expectation of male and female lives.

No. 10.—FARR'S ENGLISH TABLE No. 1.

For this very accurate Table the public are indebted to the philanthrophic and praiseworthy efforts of the indefatigable physician William Farr, of London. It was compiled from the entire census returns of lives and deaths at all ages, in the realm of England, during the year 1841, and published in the Sixth Report of the Registrar-General.

No. 11-FARR'S ENGLISH TABLE No. 2.

This was calculated by Dr. WILLIAM FARR, subsequently to his Table No. 1, from the deaths throughout the whole of England dusing the seven years 1838-44. From these data the calculations were made according to a plan recommended by Professor De Morgan and Mr. Griffith Davies.

No. 12.—Farr's English Table No. 3.

The rate of mortality deduced from this Table is higher than is given by the Carlisle Table or by either of the two former English Life Tables of the author. It is more regular in its graduation than the Carlisle Table, while at the same time its rate approximates more nearly that assigned to American life.

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I. BRESLAU TABLE (Edmund Halley).

2 85 3 77 5 73 6 71 7 69 8 68 9 67 10 66 11 65 12 64 13 64 14 62 17 61 19 60 20 59 21 58 22 58 23 57 24 57 25 26 26 56 27 55 28 54 29 53 31 52 32 53 33 52 34 49 35 48 36 48 37 49 38 46 39 45 39 45 39 45	Living.	Dying.	Expectation,	Age,	Living.	Dying.	Expectation.
3 75 4 76 5 73 6 71 7 66 8 68 9 67 10 66 11 65 11 65 11 65 11 65 11 60 11 65 11 60 11 65 11 60 11 65 11 60 11 50 11 50 12 50 13 50 14 50 15 50 16 50 17 50 18 50 1	1000	145	33.22	46	387	10	19.05
4 76 5 73 6 76 7 66 8 68 9 67 10 66 11 65 11 64 13 64 14 63 15 62 16 62 17 61 18 61 19 60 20 59 21 59 21 59 22 58 23 57 24 57 26 56 27 56 28 54 29 53 30 53 31 52 31 52 32 58 33 57 49 53 49 53 49 53 49 53 49 53 49 53 49 54 59 59 59 59 5	855 798	57 38	37.77 39.43	47 48	377 367	10	18.55 18.04
7 65 8 68 9 67 10 66 11 65 11 64 113 64 114 63 115 62 117 61 119 60 20 59 21 58 23 57 24 57 56 26 56 27 55 28 54 29 53 31 52 31 52 3	760	28	40.38	49	357	11	17.53
7 65 8 68 9 67 10 66 11 65 11 64 113 64 114 63 115 62 117 61 119 60 20 59 21 58 23 57 24 57 56 26 56 27 55 28 54 29 53 31 52 31 52 3	732	22 18	40.90	50	346	11	17.07
9 67 10 66 11 64 13 64 14 63 15 62 16 62 17 61 19 60 20 59 21 59 21 59 22 58 23 57 24 57 26 56 27 55 28 54 30 53 31 52 31 52 32 58 33 57 49 53 36 48 37 49 38 46 39 45	710 692	12	41.16 41.22	51 52	335 324	11	16.61 16.16
9 67 10 66 11 64 113 64 114 63 115 62 116 62 117 61 119 60 20 59 21 59 21 59 22 58 23 57 24 57 26 56 27 55 28 54 29 53 30 53 31 52 32 59 33 57 49 53 34 49 35 49 36 48 37 49 38 46 39 45	680	10	40.94	53	313	11	15.71
11 65 12 64 13 64 14 63 15 62 16 62 17 61 18 61 19 60 20 59 21 59 22 58 23 57 24 57 26 56 27 55 28 54 29 53 30 53 31 52 31 52 32 43 57 49 53 49 53 49 45 47 38 46 47 38 46 48 46 49 45 47 38 46 47 38 46 48 39 45	670	9	40.54	54	302	10	15.26
12 64 13 64 14 63 15 62 17 61 18 61 19 60 20 59 21 59 22 58 23 57 25 56 27 55 28 54 29 53 30 53 31 52 32 51 23 25 24 49 35 49 36 48 37 47 38 46	661	8	40.08	55 56	292 282	10	14.77
13 64 14 63 15 62 16 62 17 61 18 61 19 60 20 59 21 59 22 58 23 57 24 57 25 56 26 56 27 55 28 54 29 53 30 53 31 52 29 53 30 48 37 49 36 48 37 47 38 46	646	7	39.57 38.99	57	272	10	14.27 13.79
14 63 15 62 17 61 18 61 19 60 20 59 21 58 22 58 23 57 24 57 56 26 56 27 55 28 54 29 53 31 52 31 52 32 49 35 49 36 48 37 49 38 46	640	6	38.35	58	262	10	12.91
16 62 17 61 18 61 19 60 20 59 21 59 21 59 22 58 23 57 24 57 26 56 27 55 28 54 30 53 31 52 31 59 32 49 33 49 36 48 37 49 38 46 39 45	634	6	37.71	59	252	10	12.79
17 61 18 61 19 60 20 59 21 59 22 58 23 57 25 56 27 55 28 54 29 53 30 53 31 52 32 57 33 57 49 35 49 48 37 47 38 46	628	6	37.07	60	242	10	12.30
18 61 19 60 20 59 21 59 22 58 23 57 24 57 25 56 26 56 27 55 28 54 29 53 30 53 31 52 29 53 30 48 31 49 35 49 36 48 37 47 38 46	616	6	36.42 35.77	62	232	10	11.77
20 59 21 59 22 58 23 57 24 57 25 56 26 56 27 55 28 54 30 53 31 52 31 52	610	6	35.12	63	212	10	10.83
21	604	6	34.46	64	202	10	10.24
22	598	6	33.80	65	192	10	9.86
23 57 24 57 25 56 26 56 27 55 28 54 29 53 30 53 31 52 32 51 32 50 34 49 35 49 36 48 37 47 38 46	586	7	33.14 32.49	67	172	10	9.37 8.89
25 56 26 56 27 55 28 54 29 53 30 53 31 52 32 51 34 49 35 49 36 48 37 47 38 46	579	7	31.85	68	162	10	8.40
26 56 27 55 28 54 29 53 30 53 31 52 32 51 33 50 34 49 36 48 37 47 38 46 39 45	573	6	31.29	69	152	10	7.93
27	567	7	30.51	70 71	142	II	7.45
29 53 30 53 31 52 32 51 33 50 34 49 35 49 36 48 37 47 38 46 39 45	553	7	29.26	72	120	11	6.64
29 53 30 53 31 52 32 51 33 50 34 49 35 49 36 48 37 47 38 46 39 45	546	7 7 8 8	28.63	73	100	11	6.25
31 52 32 51 33 50 34 49 35 49 36 48 37 47 38 46 39 45	539	8	27.99	74	98 88	10	5.89
32 51 33 50 34 49 35 49 36 48 37 47 38 46 39 45	531	8	27.41 26.82	75 76	88 78	10	5.51 5.15
\$3 50 \$4 49 35 49 36 48 37 47 38 46 39 45	515	8	26.23	77	68	10	4.84
35 49 36 48 37 47 38 46 39 45	507	8	25.64	78	58 *	8	4.59
37 38 46 39 45	499	9	25.04	79	49	8	4 - 34
37 38 46 39 45	490 481	9	24.50	80 81	41 34	7	4.08 3.80
38 46 39 45	472	9	23.60	82	28	5	3.54
	463	9	23.26	83	23	4	3.19
40 44	454	9	22.72	84	19	4	2.76
41 43	445	9	22.16 21.61	85 86	15	4 3	2.37
	427	10	21.06	87	8	3	1,63
43 41	417	IO	20.55	88	5	2	0.80
44 40 45 39	407	IO IO	19.53	89 90	3	2 I	0.33

II. LONDON TABLE (Richard Price).

Age.	Living.	Dying.	Expectation.	Age.	Living.	Dying.	Expectation.
0	1518	486	17.90	46	262	10	
	1032 832	200 85		47 48	252	10	
3	747	59		49	242 233	9	
2 3 4 5 6 7 8	688	42		50	224	9	15.84
5	646	23	35.28	51	215	9 9 8 8	-5.04
6	623	20		52	206	8	
7	603	14		53	198	8	
9	589 577	12		54	183	7	** **
10	567	9	34.91	55 56	176	7	13.91
11	558	9	34.3-	57	160	7	
12	549	8		57 58	162	7	
13	541	9 8 7 6 6		59 60	155	8	
14	534 528	6		60	147	8	11.69
16	522		33.32	62	139	7	
17	515	7	}	63	125	7	
18	508	7 7 7 7 7 8 8 8 8		64	118	77777887777776666555554	
19	501	7		65	III	7	9.69
20	494	7	29.37	66	104	7	
2I 22	487	8		67 68	97	7	
23	479 471	8		69	90 83	7	
24	463	8		70	76	6	8.00
25	455	8	20.60	71	70	6	
26	447	8	{	72	64	6	
27	439	8		73	58	5	
20	431 422	9		74	53 48	5	6.27
30	413	9	24.11	75 76	43	2	0.2/
31	404	ó		77	38	5	
32	395	9		77 78	33	4	
33	386	9		79 80	29	4 3 3	
34 35	377 368	9	21.76	81	25	3	4.86
36	359	9	21.70	82	19	3	
37	350	9 9 9 9		83	16	3	
38	341	9		84	13	2	
39	332	10		85	II	2	3.04
40 41	322	10	19.50	86 87	9	2 2	
41	302	10	- Control	88	7 5	2	
43	292	10		89	4	1	
44	282	10		90	3	I	
45	272	10	17.63				
						1	

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III. SWEDISH TABLE (RICHARD PRICE).

Age.	Living.	Dying.	Expectation.	Age.	Living.	Dying.	Expectation
	10000	2195	34.42	49	3924	78	19.09
0	7805	509	42.95	50	3846	85	18,46
2	7296	344	44.92	51	3761	87	17.87
3	6952	245	46.11	52	3674	90	17.29 16.70
4	6707	143	46.78 46.79	53 54	3584 3494	91	16,12
4 5 6 7 8	6564 6442	122	46.66	55	3403	91	15.53
7	6337	87	46.43	56	3312	92	14.95
8	6250	73	46.07	57	3220	95	14.37
9	6177	62	45.61	58	3125	95	13.79
10	6115	54	45.07 44.38	59 60	2930	108	12.63
11 12	6016	45 42	43.70	61	2822	114	12.12
13	5974	38	43.01	62	2708	118	11.62
14	5936	37	42.33	63	2590	118	11,11
15	5899	37	41.64	64	2472 2354	118	10.10
16	5862 5822	40	40,92 40,19	66	2236	118	9.62
17 18	5782	42	39.47	67	2118	121	9.15
19	5740	43	38.74	68	1997	124	8.67
20	5697	47	38.02	69	1873	124	8.20
2.1	5650	47 48	37.33 36.64	70 71	1749	133	7.32
22	5603	48	35.96	72	1489	135	6,89
23 24	5555 5507	50	35.27	73	1354	140	6.53
25	5457	50	34.58	74	1214	130	6,23 5,91
26	5407	52	33.91	75 76	1084	121	5.59
27	5355	54	33.23 32.56	70	848	105	5.28
28	5301 5246	55 55	31.88	77 78	743	95	4.96
29 20	5191	59	31.21	79 80	648	90	4.61
31	5132	59 60	30.57	80	558 468	90 84	4.28 4.0I
32	5072	62	29.94	82	384	75	3.80
33	5010 4947	63	28.67	83	309	65	3.57
34 35	4884		28.03	84	244	55	3.39
36	4825	59 58	27.31	85 86	189	45 35	3.23
37	4767	58	26.68 26.01		144	27	2.92
38	4709 4651	58	25.33	87 88	82	20	2.71
39 40	4591	65	24.66	89	62	15	2.43
41	4526	73 78	24.05	90	47	14	1.71
42	4453	78	23.44	91	33	10	1.40
43	4375	78 78	22.83	93	11	6	1.23
44	4297 4219	76	21,61	94	5	3	1.10
45 46	4143	74	20.98	95	2	I	0.00
47	4069	72	20.35	96	I	1	0.03
48	3997	73	19.72	97	1		

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IV. FRENCH TABLE (M. DEPARCIEUX).

Age.	Living.	Dying.	Expectation.	Age.	Living.	Dying.	Expectation.
3 4 4 5 6 7 8 9 10 112 13 14 15 6 17 8 19 20 21 22 23 24 25 6 27 28 29 30 31 32 33 34 35 36 37 38 39 9 41 42	1000 970 948 930 915 902 880 870 886 866 864 848 848 848 848 849 790 782 774 766 758 775 742 736 747 766 766 678 678 671 667 667 667 667 667 667 667 667 667	30 22 18 15 12 10 8 6 6 6 6 6 6 7 7 7 7 7 8 8 8 8 8 8 8 8	47.71 48.27 48.27 48.27 47.66 47.30 46.83 46.26 45.58 44.89 44.20 43.51 42.82 42.17 41.52 40.22 39.62 39	49 50 51 52 53 53 54 55 55 55 56 66 66 66 66 67 67 70 77 77 78 80 81 82 83 84 85 86 87 87 88 88 88 88 88 88 88 88 88 88 88	590 581 571 560 549 538 526 463 463 450 437 423 409 380 364 347 329 329 271 251 271 251 173 1156 118 101 105 105 105 105 105 105 105	9 10 11 11 12 12 12 13 13 13 13 14 14 14 15 16 17 18 19 20 20 19 19 19 18 17 18 17 18 19 19 19 19 19 19 18 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	21.07 20.38 19.73 19.11 18.48 17.85 16.64 16.02 15.44 14.84 14.25 13.65 13.04 12.43 11.86 10.69 10.14 9.61 9.61 9.61 9.77 7.73 6.50 6
43 44 45 46 47 48	636 629 622 615 607 599	7 7 7 8 8 9	25.34 24.62 23.89 23.15 22.45 21.74	89 90 91 92 93	16 11 7 4 2	5 4 3 2 1	2.06 1.77 1.50 1.25 1.00

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V. NORTHAMPTON TABLE (RICHARD PRICE).

Age.	Living.	Dying.	Expectation.	Age.	Living.	Dying.	Expectation.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 26 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28	11650 8650 7283 6781 6446 60249 6065 5925 5815 5735 5675 5623 5573 55473 5473 5473 5120 5262 5199 5132 54760 4985 4910 4835 4760 4685 4685	3000 1367 502 335 197 184 140 80 60 52 50 50 50 50 50 50 75 75 75 75 75	25.18 32.74 37.79 39.55 40.58 40.84 41.07 41.03 40.79 40.36 39.78 39.74 38.49 37.83 37.17 36.51 35.85 35.20 34.58 33.99 33.49 32.90 32.39 30.85	49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 70 77 78 77 78	2936 2837 2776 2694 2612 2530 2448 2366 2284 2202 2120 2038 1956 1874 1793 1712 1632 1152 1472 1312 1212 1072 9012 832 675 6075	79 \$1 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2 \$2	18.49 17.99 17.50 17.02 16.54 16.06 15.58 15.10 14.63 14.15 13.21 12.75 13.68 13.21 12.75 13.68 13.21 12.75 13.68 14.15 10.88 10.42 9.96 9.59 9.05 8.60 8.17 7.74 7.33 6.92 6.54 6.18 5.83 5.48
29 30 31 32 33 34 35 36 37 38 39 40 41 42 45 46 47 48	4460 4385 4310 4235 4160 4085 4010 3935 3860 3785 3710 3635 3599 3482 3404 3126 3226 3248 3170	75 75 75 75 75 75 75 75 76 77 78 78 78 78 78 78	28. 79 28. 27 27. 76 27. 24 26. 72 26. 20 25. 68 25. 16 24. 64 24. 12 23. 68 22. 56 22. 04 21. 54 21. 03 20. 52 20. 02	79	534 469 406 346 289 234 111 83 62 46 34 24 111	65 63 60 57 55 48 41 34 28 21 10 16 12 10 8 7	3.11 4.75 4.41 4.09 3.80 3.58 3.37 3.01 2.86 2.66 2.66 2.1.37 1.05 0.75

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VI. CARLISLE TABLE (Joshua MILNE).

		1					
Age.	Living.	Dying.	Expectation.	Age.	Living.	Dying.	Expectation,
0	10000	1539	38.721	53	4211	68	18.972
I	8461	682	44.674	54	4143	70	18.275
2	7779	505	47.546	55	4073	73	17.580
3	7274	276	49.812	55 56	4000	76	16.892
5	6998	201	50.757	57	3924	82	16,209
5	6797	121	51.244	58	3842	93	15.545
0	6676	82	51,163	59 60	3749	106	14.918
7	6594 6536	58	50.793	61	3643 3521	122	14.337
9	6493	43 33	50,240 49,569	62	3395	127	13.817 13.311
10	6460	29	48.820	63	3393	125	12,800
II	6431	31	48,038	64	3143	125	12,299
12	6400	32	47.268	65	3018	124	11.787
13	6368	33	46.503	66	2894	123	11.271
14	6335	35	45.742	67	2771	123	10.749
15	6300	39	44.994	68	2648	123	10.225
16	6261	42	44.271	69	2525	124	9 6 99 9. 147
17	6219	43 43	43.567 42.866	.70 71	240I 2277	124	8.646
19	6133	43	42.163	72	2143	146	8.156
20	6090	43	41.458	73	1977	156	7.715
21	6047	42	40.749	74	1841	166	7.327
2.2	6005	42	40.030	75 76	1675	160	7.003
23	5963	42	39.309	76	1515	156	6.690
24	5921	42	38.584	77 78	1359	146	6.401
25 26	5879	43	37.856 37.131	78	1213	132	6,11 1 5.7 96
27	5836	43	36,403	79 80	953	116	5.507
28	5793 5748	50	35.684	81	837	112	5.20I
29	5698	56	34.993	82	725	102	4.928
30	5642	57	34.336	83	623	94	4 652
31	5585	57	33.681	84	529	84	4.390
32	5528	56	33.023	85	445	78	4.125
33	5472	55	32.356 31.679	86 87	367 296	71 64	3.89 5 3.700
34	5417	55	30.999	88	232	51	3.395
36	5307	56	30.315	89	181	39	3.467
	5251		29.633	90	142	37	3.282
37 38	5194	57 58	28.953	91	105	30	3.262
39	5136	61	28.274	92	75	21	3.367
40	5075	66	27.608	93	54	14	3.481
41	5009	69	26.965 26.335	94 95	40 30	7	3.525 3.533
42	4940 4869	71 71	25.712	96	23	5	3.457
44	4798	71	25.085	97	18	4	3.278
45	4727	70	24.454	98	14	3	3.071
46	4657	69	23.814	99	11	2	2.773
47	4588	67	23.165	100	9	2	2.278
48	4521	63	22.500	IOI IO2	7	2 2	1.786
49	4458	61	21.811	102	5	2 2	0.833
50 51	4397 4338	59 62	20.387	104	. 3 I	1	0.500
52	4276	65	19.676				

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VII. EQUITABLE TABLE (GRIFFITH DAVIES).

Age. Living. Dying. Expectation. Age. Living. Dying. Expectation.								
11	Age.	Living.	Dying.	Expectation.	Age.			Expectation.
11	10	2844	11					
13 2810 12 46.40 57 1659 44 16.71 14 2798 13 45.60 58 1615 44 16.71 15 2785 14 44.81 59 1570 46 15.60 16 2771 15 44.04 60 152.4 46 15.60 17 2756 16 43.27 61 1478 46 15.01 18 2740 17 42.52 62 1432 47 13.96 19 2723 18 41.78 63 1385 48 13.42 20 2705 18 41.06 64 1337 49 12.88 21 2687 18 40.33 65 1288 50 12.35 22 2669 19 39.60 66 1238 51 11.83 23 2650 19 38.88 67 1187 52 11.35 24 2631 20 38.16 68 1135 53 10.82 24 2631 20 38.16 68 1135 53 10.82 25 2611 20 37.44 69 1082 54 10.32 26 2501 21 36.73 70 1028 54 9.84 27 2570 22 36.02 71 974 55 9.36 28 2548 23 35.33 72 919 55 8.88 29 2525 24 34.65 73 864 56 8.42 27 2570 22 36.02 71 974 55 9.36 30 2501 24 33.98 74 808 56 7.97 31 2477 25 33.30 75 752 55 7.52 32 2452 26 32.64 76 697 55 7.08 34 2400 26 31.32 78 588 54 6.20 33 2400 26 31.32 78 588 54 6.20 34 2400 26 31.32 78 588 54 6.20 35 2374 27 30.61 80 480 54 55.78 36 2347 27 30.61 80 480 54 55.78 36 2347 27 30.61 80 480 54 55.78 36 2347 27 30.61 80 480 54 55.78 36 2347 27 30.61 80 480 54 55.78 36 2347 27 30.61 80 480 54 55.78 36 2347 27 30.61 80 480 54 55.78 36 2347 27 30.61 80 480 54 5.78 36 2347 27 30.61 80 480 54 55.78 36 2347 27 30.61 80 480 54 5.78 36 2347 27 30.61 80 480 54 55.78 36 2347 27 30.61 80 480 54 5.78 36 2347 27 30.61 80 480 54 5.78 36 2347 27 30.61 80 480 54 5.78 36 2347 27 30.61 80 480 54 5.78 36 2347 27 30.61 80 480 54 5.38 37 2320 28 28.50 82 373 52 4.63 40 2236 28 26.74 85 224 43 3.33 42 200 28 28 26.74 85 224 44 33 3.33 42 2152 29 25.40 87 143 32 3.31 43 2152 29 25.40 87 143 32 3.31 44 2203 28 26.07 86 181 38 3.50 43 2152 29 25.40 87 143 32 3.31 48 2002 32 22.12 92 25.40 87 143 32 3.31 48 2002 32 22.12 92 25.60 37 91 91 91 13 2.36 49 1970 33 21.47 99 65 16 7 1.31 50 1937 35 20.83 94 16 7 1.31 50 1937 35 20.83 94 16 7 1.31 50 1937 35 20.83 94 16 7 7 1.31 50 1937 35 20.89 94 90 59 9 5 1.05 51 1990 37 20.20 95 9 9 5 1.05	11	2833	11					
13	12							
17	13				57			
16 2771 15 44.04 60 152.4 46 15.06 17 2756 16 43.27 61 1478 46 14.51 18 2740 17 42.52 62 1432 47 13.96 19 2733 18 41.78 63 1385 48 13.42 20 2705 18 41.06 64 1337 49 12.88 21 2687 18 40.33 65 12.88 50 12.35 22 2669 19 39.60 66 12.38 51 11.83 23 2650 19 38.88 67 1187 52 11.83 23 2650 19 38.88 67 1187 52 11.32 24 2611 20 37.44 69 10.82 54 10.32 26 2591 21 36.73 70 1028 54 9.84 27 2570 22 36.02 71 974 55 9.36 22 252 2613 20 37.44 69 10.82 54 10.32 27 2570 22 36.02 71 974 55 9.36 27 2570 22 36.02 71 974 55 9.36 8.82 29 25.25 24 33.53 72 919 55 8.88 29 25.25 24 33.98 74 808 50 7.97 31 2477 25 33.39 75 752 55 7.52 32 2452 26 32.64 76 697 55 7.52 33 2426 26 31.98 77 642 54 6.20 33 2426 26 31.32 78 588 54 6.20 34 2400 26 31.32 78 588 54 6.20 34 2400 26 31.32 78 588 54 6.20 33 2.20 2.28 2.28 2.26 2.28 2.28 2.26 2.28 2.28								
17 2756 16 43.27 61 1478 46 113.61 13.96 19 2723 18 41.78 63 11385 48 13.42 20 2725 18 41.78 63 11385 48 13.42 20 2725 18 41.06 64 1337 49 12.85 22 2669 19 39.60 66 1238 51 11.83 22 2669 19 38.88 67 1187 52 11.83 22 2669 19 38.86 68 1135 53 10.82 24 2611 20 38.16 68 1135 53 10.82 25 2611 20 37.44 69 1082 54 9.84 25 2612 25 2611 20 37.44 69 1082 54 9.84 27 2570 22 36.02 71 974 55 9.36 28 25.48 23 35.33 72 919 55 8.88 29 2525 24 33.65 73 864 56 8.42 29 2525 24 33.30 8.74 808 56 7.95 7.52 33 24.45 26 26 31.32 78 588 54 6.20 33 2400 26 31.32 78 588 54 6.20 33 2400 26 31.32 78 588 54 5.38 37 2320 28 246 26 31.98 77 642 54 6.64 34 2400 26 31.32 78 588 54 56 6.20 33 2374 27 30.01 80 480 54 5.38 37 2320 28 28 26 28 27 27 27 30.01 80 480 54 5.38 37 2320 28 28 29 2525 28 28 29 2525 28 29 2525 28 29 2525 2								
18 2740 17 42.52 62 14.32 47 13.06 19 2723 18 41.78 63 1385 48 13.42 20 2705 18 41.06 64 1337 49 12.88 21 2687 18 40.33 65 12.88 50 12.28 22 2660 19 39.60 66 12.38 51 11.83 23 2650 19 38.88 67 1187 52 11.32 24 2631 20 37.44 69 1082 54 10.32 25 2611 20 37.44 69 1082 54 10.32 26 25 2611 20 37.44 69 1082 54 10.32 27 2570 22 36.02 71 974 55 9.36 28 2548 23 35.33 72 919 55 8.88 29 2525 24 33.65 73 864 56 8.42 27 2570 24 33.98 74 808 56 7.97 31 2477 25 33.30 75 752 55 7.08 30 2501 24 33.98 74 808 56 7.97 31 2477 25 33.30 75 752 55 7.08 32 2452 26 32.64 76 697 55 7.08 33 2426 26 31.98 77 642 54 6.24 34 2400 26 31.32 78 588 54 6.20 34 2400 26 31.32 78 588 54 54 5.78 36 2347 27 30.61 80 480 54 5.78 36 2347 27 30.61 80 480 54 5.38 37 2320 28 28 28.570 82 373 52 34 6.30 39 2264 28 28.05 82 373 52 24 43 3.73 39 2264 28 28.05 83 321 50 4.30 40 2236 28 27.40 84 271 47 40.00 41 2208 28 26.07 86 181 38 3.50 43 2152 29 25.40 87 143 32 3.31 48 2002 32 22.12 92 36 11 26 3.11 49 1970 33 21.47 90 65 16 2.65 51 1990 37 20.20 95 9 5 1.05 51 1990 37 20.20 95 9 5 1.05 52 1865 39 19.59								
19 2723 18 41.78 63 1385 48 13.42 20 2705 18 41.78 63 1385 48 13.48 21 2687 18 40.33 65 1228 50 12.35 11.83 22 2669 19 38.88 67 1187 52 11.32 24 2631 20 38.16 68 1135 53 10.82 24 2631 20 37.44 69 10.82 54 10.32 26 2591 21 36.73 70 10.82 54 10.32 26 2591 21 36.73 70 10.82 54 10.32 28 2548 23 35.33 72 919 55 8.88 29 25.25 24 33.65 73 864 56 7.9 36 8.42 30 25.01 24 33.98 74 808 56 7.9 36 8.42 30 25.01 24 33.98 74 808 56 7.9 31 24.77 24.50 26 31.98 77 60.2 54 6.64 34 24.00 26 31.32 78 588 54 6.20 33.34 24.00 26 31.32 78 588 54 5.38 32 2.34 2.34 2.36 2.37 30.01 80 480 54 5.38 37 2.32 2.88 2.37 2.7 30.01 80 480 54 5.38 39 2.20 2.88 2.88 2.9.35 81 426 53 5.00 41 2.30 2.30 2.30 2.30 2.30 2.30 2.30 2.30								
20 2705 18 41.06 6.4 1337 49 12.88 21 2687 18 40.33 65 12.88 50 12.35 22 2669 19 39.60 66 1238 51 11.83 11.83 22 2669 19 38.88 67 1187 52 11.83 10.82 24 2611 20 38.16 68 1135 53 10.82 25 2611 21 36.73 70 1028 54 10.32 27 2570 22 36.02 71 974 55 9.36 28 2548 23 35.33 72 919 55 8.88 29 2525 24 34.65 73 864 56 8.42 29 2525 24 34.65 73 864 56 8.42 29 2525 24 34.65 73 864 56 8.42 29 2525 24 34.65 73 864 56 8.42 29 2525 24 34.05 73 864 56 8.42 29 2525 24 34.05 73 864 56 8.42 29 2525 24 34.05 73 864 56 8.42 31 2477 25 33.90 75 752 55 7.52 33 2426 26 31.98 77 752 55 7.08 6.64 34 2400 26 31.32 78 588 54 6.20 31.32 78 588 54 6.20 31.32 78 588 54 6.20 31.32 78 588 54 5.38 31 2426 26 31.98 77 842 54 54 6.64 31 35 2374 27 30.01 80 480 54 5.78 31 2240 26 31.32 78 588 54 6.20 31 39 2264 28 28.570 82 373 52 4.63 39 2264 28 28.570 82 373 52 4.63 39 2264 28 28.570 82 373 52 4.63 39 2264 28 28.570 82 373 52 4.63 39 2264 28 28.570 82 373 52 4.63 39 2264 28 28 26.77 86 181 38 3.50 3.50 43 2152 29 25.40 87 143 32 3.31 24.75 88 111 26 3.11 42 208 28 26.07 86 181 38 3.50 4.63 49 1970 33 21.47 90 65 16 2.65 47 2033 31 22.78 91 49 13 2.36 49 1970 33 21.47 93 25 9 1.70 55 1937 35 20.83 94 16 7 1.31 50 5.75 51 1997 35 20.83 94 16 7 1.31 50 5.75 52 1865 39 19.59 96 4 3 3 0.75 5			18					
21							49	
22 2669 19 39.60 66 1238 51 11.32 23 2650 19 38.88 67 1187 52 11.32 24 2631 20 38.16 68 1135 53 10.82 26 2591 21 36.73 70 1028 54 9.84 27 2570 22 36.02 71 974 55 9.36 28 2548 23 35.33 72 919 55 8.88 29 2525 24 33.98 74 808 56 7.97 30 2501 24 33.98 74 808 56 7.97 31 2477 25 33.30 75 752 55 7.52 32 2452 26 31.98 77 642 54 6.64 34 2400 26 31.98 77 642 54								
24 2631 20 38.16 68 1135 53 10.82 26 2501 21 36.73 70 1028 54 9.84 27 2570 22 36.02 71 974 55 9.36 29 2525 24 334.65 73 864 56 8.42 29 2525 24 334.65 73 864 56 8.42 29 2525 24 334.65 73 864 56 8.42 29 2525 24 334.65 73 864 56 8.42 29 2525 24 334.65 73 864 56 8.42 29 2525 24 334.65 73 864 56 8.42 29 2525 24 334.65 73 864 56 8.42 29 2525 24 334.65 73 864 56 8.42 24 24 22 26 31.32 75 752 25 7.52 26 23 2.45 2 26 31.98 77 642 54 6.64 6.24 24 26 26 31.98 77 642 54 6.64 25 24 26 27 27 30.61 80 480 54 5.38 37 2320 28 28.70 80 480 54 5.38 37 2320 28 28.70 82 373 52 4.63 39 2264 28 28.70 82 373 52 4.63 39 2264 28 28.70 82 373 52 4.63 39 2264 28 28.70 82 373 52 4.63 373 2230 28 28.70 82 373 32 4.63 28 27.40 84 271 47 4.00 4.00 4.20 28 28 26.74 85 224 43 3.33 3.31 42 208 28 26.07 86 181 38 3.50 3.44 2123 30 24.75 88 111 26 3.11 42 208 28 26.07 86 181 38 3.50 3.31 44 2123 30 24.75 88 111 26 3.11 42 203 30 24.75 88 111 26 3.11 42 203 31 22.78 91 49 13 2.36 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 50 1970 33 21.47 93 25 9 9 1.70 51 1902 37 20.20 95 9 5 9 1.70 55 2 1865 39 19.59 96 4 3 0.75 5		2669	19					
25 2611 20 37.44 69 1082 54 10.32 26 2591 21 36.73 70 1028 54 9.84 27 2570 22 36.02 71 974 55 9.36 28 2548 23 35.33 72 919 55 8.88 29 2525 24 34.65 73 864 56 8.42 31 2477 25 33.98 74 808 56 7.97 31 2477 25 33.90 75 752 55 7.08 6.24 32 24.52 26 32.64 76 697 55 7.08 6.24 33 2426 26 31.98 77 642 54 6.64 34 2400 26 31.32 78 588 54 6.20 31.32 78 588 54 6.20 31.32 78 588 54 5.38 31 2470 27 30.01 80 480 54 5.78 36 2347 27 30.01 80 480 54 5.38 37 23.20 28 29.35 81 426 53 39 2264 28 82.740 84 271 47 4.00 40 21.36 28 26.07 86 181 38 3.50 4.30 22.16 28 28 26.07 86 181 38 3.50 4.30 4.21 20.28 28 26.07 86 181 38 3.50 4.30 4.41 22.08 28 26.07 86 181 38 3.50 4.41 22.08 28 26.07 86 181 38 3.50 4.41 22.08 28 26.07 86 181 38 3.50 4.41 22.08 28 26.07 86 181 38 3.50 4.41 22.08 28 26.07 86 181 38 3.50 4.41 22.03 30 24.10 89 85 20 2.91 47 47 4.00 40 19.00 40 19.00 31 22.78 91 49 13 2.36 49 19.70 31 22.78 91 49 13 2.36 49 19.70 31 22.78 91 49 13 2.36 49 19.70 31 22.78 91 49 13 2.36 49 19.70 31 22.78 91 49 13 2.36 51 19.70 31 22.78 91 49 13 2.36 51 19.70 31 22.78 91 59 5 9 5 1.05 51 1.70 52 18.65 39 19.59 96 4 3 0.75 51 1.70 52 18.65 39 19.59 96 4 3 0.75 51 1.70 52 18.65 39 19.59 96 4 3 0.75 51	23				07			
26 2591 21 36.73 70 1028 54 9.84 27 2570 22 36.02 71 974 55 28 2548 23 35.33 72 919 55 8.88 29 2525 24 34.65 73 864 56 8.42 30 2501 24 33.98 74 808 56 7.97 31 2477 25 33.30 75 752 55 7.08 32 2452 26 31.64 76 607 55 7.02 33 2426 26 31.98 77 642 54 6.64 34 2400 26 31.98 77 642 54 6.64 34 2400 26 31.98 77 642 54 6.20 35 2374 27 30.01 80 480 54 5.38 36 2347 27 30.01 80 480 54 5.38 37 2320 28 28.70 82 373 52 4.63 38 2202 28 28.70 82 373 52 4.63 39 2204 28 28.70 82 373 52 4.63 40 2236 28 27.40 84 271 47 4.00 41 2208 28 26.74 85 224 43 3.73 42 2180 28 26.07 86 181 38 3.50 41 2208 28 26.07 86 181 38 3.50 41 2208 28 26.07 87 143 32 3.31 42 2180 28 26.07 86 181 38 3.50 43 2152 29 25.40 87 143 32 3.31 44 2123 30 24.75 88 111 26 3.11 45 2003 30 24.75 88 111 26 3.11 45 2003 30 24.75 88 111 26 3.11 45 2003 30 24.75 88 111 26 3.11 45 2003 30 24.75 88 111 26 3.11 45 2003 31 22.78 91 49 13 2.36 46 2063 33 21.47 99 65 16 7 1.70 50 1937 35 20.83 94 16 7 1.31 50 0.75 51 1902 37 20.20 95 9 5 9 1.70 52 1865 39 19.59								
27 2570 22 36.02 71 974 55 9.36 28 2548 23 35.33 72 919 55 8.88 29 2525 24 34.65 73 864 56 8.42 30 2501 24 33.98 74 808 56 7.97 31 2477 25 33.30 75 752 55 7.52 32 2452 26 32.64 76 697 55 6.64 33 2426 26 31.98 77 642 54 66.64 34 2400 26 31.32 78 588 54 6.20 34 2420 26 31.32 78 588 54 6.20 35 2374 27 30.01 80 480 54 5.38 36 2347 27 30.01 80 480 54 5.38 37 2320 28 29.35 81 426 53 5.00 38 2202 28 28.70 82 373 52 4.63 39 2264 28 28.50 82 373 52 4.63 39 2264 28 28.05 83 321 50 4.30 40 2236 28 27.40 84 271 47 4.00 40 2238 28 26.74 85 224 43 3.73 41 2208 28 26.74 85 224 43 3.73 42 2180 28 26.07 86 181 38 3.50 43 2152 29 25.40 87 143 32 3.31 44 2123 30 24.75 88 111 26 3.11 45 2093 30 24.10 89 85 20 2.91 46 2063 30 23.44 90 65 16 2.65 47 2033 31 22.78 91 49 13 2.36 49 1970 33 21.47 93 25 9 1.70 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 50 75 51 1902 37 20.20 95 9 5 1.05 52 1865 39 19.59								
28								
29 2725 24 34.65 73 864 56 7.97 30 2501 24 33.98 74 808 56 7.97 31 2477 25 33.30 75 752 55 7.52 32 2452 26 32.64 76 697 55 7.08 33 2426 26 31.98 77 642 54 6.64 34 2400 26 31.32 78 588 54 6.20 35 2377 27 30.01 80 480 54 5.78 36 2347 27 30.01 80 480 54 5.38 37 2320 28 28.50 82 373 52 4.63 39 2264 28 28.50 82 373 52 4.63 39 2264 28 28.50 83 321 50 4.30 40 2236 28 27.40 84 271 47 4.00 41 2208 28 28.07 85 24 43 3.73 41 2208 28 26.74 85 224 43 3.73 42 2180 28 26.07 86 181 38 3.50 41 2208 28 26.07 85 181 32 3.31 42 2180 28 26.07 85 181 38 3.50 43 2152 20 25.40 87 143 32 3.31 44 2123 30 24.75 88 111 26 3.11 45 2003 30 24.10 89 85 20 2.91 46 2063 30 23.44 90 65 16 2.05 47 2033 31 22.78 91 49 13 2.36 48 2002 32 22.12 92 36 11 2.03 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 50 1975 20 1865 39 19.59						919	55	
36 2501 24 33.98 74 808 50 7.97 7.97 31 2477 25 33.30 75 752 55 7.97 32 2452 26 31.98 77 642 54 6.64 33 2426 26 31.98 77 642 54 6.64 34 2400 26 31.32 78 588 54 6.20 35 2374 27 30.06 79 534 54 5.78 36 2347 27 30.01 80 480 54 5.78 37 2320 28 29.35 81 426 53 5.08 38 2202 28 28.79 82 373 52 4.63 39 2264 28 28.05 83 321 50 4.30 40 2236 28 26.74 85 224 43 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
11 2477 25 33.30 75 752 55 7.08 32 2452 26 32.64 76 697 55 7.08 33 2426 26 31.98 77 642 54 6.64 34 2400 26 31.32 78 588 54 6.20 35 2374 27 30.66 79 534 54 5.78 36 2347 27 30.66 79 534 54 5.78 36 2347 27 30.66 79 534 54 5.78 36 2347 27 30.61 80 480 54 5.38 37 2320 28 20.35 81 426 53 5.00 38 2.202 28 28.70 82 373 52 4.63 40 2.26 28 27.40 84 271 47 4.00 </td <td></td> <td></td> <td></td> <td></td> <td>74</td> <td></td> <td></td> <td></td>					74			
32 2426 26 31.98 77 642 54 6.64 34 2400 26 31.32 78 588 54 6.20 35 2374 27 30.66 79 534 54 5.78 36 2347 27 30.01 80 480 54 5.38 37 2320 28 28.20,35 81 426 53 5.00 38 2292 28 28.70 82 373 52 4.63 39 2204 28 28.55 83 321 50 4.30 0 2236 28 27.40 84 271 47 4.00 41 2208 28 26.74 85 224 43 3.73 42 2180 28 26.07 86 181 38 3.50 43 2152 29 25.40 87 143 32 3.31 42 2123 30 24.75 88 111 26 3.11 45 2003 30 24.75 88 111 26 3.11 45 2003 30 24.75 88 111 26 3.11 45 2003 30 24.75 88 111 26 3.11 46 2063 30 23.44 90 65 16 2.65 47 2033 31 22.78 91 49 13 2.36 48 2002 32 22.12 92 36 11 2.03 49 1970 33 21.47 93 25 9 1.70 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 50 1971 35 20.83 94 16 7 1.31 50 1972 37 20.20 95 9 5 1.05 51 1902 37 20.20 95 9 5		2477			75			
33	32				76			
35					77	c88		
35 23,47 27 30.01 80 480 54 5.38 37 2320 28 29.35 81 426 53 38 2202 28 28.70 82 373 52 4.63 39 2264 28 28.80 83 321 50 40 2236 28 27.40 84 271 47 4.00 41 2208 28 26.74 85 224 43 3.73 42 2180 28 26.07 86 181 38 3.50 43 2152 29 25.40 87 143 32 3.31 44 2123 30 24.75 88 111 26 3.11 45 2093 30 24.10 89 85 20 2.14 46 2063 30 23.44 90 65 16 2.65 47 2033 31 22.78 91 49 13 2.36 48 2002 32 22.12 92 36 11 2.03 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 51 1902 37 20.20 95 9 5 1.05 52 1865 39 19.59								
37 2320 28 29.35 81 426 53 5.00 38 2202 28 28.70 82 373 52 4.63 39 2264 28 28.05 83 321 50 4.30 40 2236 28 27.40 84 271 47 47 4.00 41 2208 28 26.74 85 224 43 3.73 42 2180 28 26.07 86 181 38 3.50 43 2152 29 25.40 87 143 32 3.31 44 2123 30 24.75 88 111 26 3.11 45 2093 30 24.10 89 85 20 23.11 46 2063 30 23.44 90 65 16 2.65 47 2033 31 22.78 91 49 13 2.36 48 2002 32 22.12 92 36 11 2.03 48 2002 32 22.12 92 36 11 2.03 49 1970 33 21.47 93 25 9 1.70 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 51 1902 37 20.20 95 9 5 1.05 52 1865 39 19.59	35							
38 2202 28 28.70 82 373 52 4.63 39 22.64 28 28.05 83 321 50 4.60 40 22.16 28 27.40 84 271 47 4.00 41 22.08 28 26.74 85 224 41 3.35 42 2180 28 26.07 86 181 38 3.50 43 2152 29 25.40 87 143 32 3.31 44 2123 30 24.75 88 111 26 3.11 45 2003 30 24.10 89 85 20 2.91 46 2063 30 23.44 90 65 16 2.65 47 2033 31 22.78 91 49 13 2.36 48 2002 32 22.12 92 36 11 2.03 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5.00</td>								5.00
39 22 (4) 28 28.05 83 321 50 4.00 40 22 36 28 27.40 84 271 47 4.00 41 22 08 28 26.74 85 224 43 3.73 42 2180 28 26.07 86 181 38 3.3 43 2152 29 25.40 87 143 32 3.31 44 2123 30 24.75 89 85 20 2.91 45 2003 30 23.44 90 65 16 2.65 47 2033 31 22.78 91 49 13 2.36 48 2002 32 22.12 92 36 11 2.03 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31	38							
40			28	28.05				
41 2288 28 26.07 86 181 38 3.50 43 2152 29 25.40 87 143 32 3.31 44 21213 30 24.75 88 111 26 3.11 45 2093 30 24.10 89 85 20 2.65 46 2063 30 23.44 90 65 16 2.65 47 2033 31 22.78 91 49 13 2.36 48 2002 32 22.12 92 36 11 2.03 49 1970 33 21.47 93 25 9 1.70 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 51 1902 37 20.20 95 9 5 1.05 52 1865 39 19.59 96 4 3 0.75	40							
42 2152 29 25.40 87 143 32 3.31 44 2123 30 24.75 88 111 26 3.11 45 2093 30 24.10 89 85 20 2.91 46 2063 30 23.44 90 65 16 2.65 47 2033 31 22.78 91 49 13 2.36 48 2002 32 22.12 92 36 11 2.03 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 51 1902 37 20.20 95 9 5 1.05 52 1865 39 19.59 96 4 3 0.75								
43 2124 30 24.75 88 111 26 3.11 45 2093 30 24.10 89 85 20 2.65 46 2063 30 23.44 90 65 16 2.65 47 2033 31 22.78 91 49 13 2.36 48 2002 32 22.12 92 36 11 2.03 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 51 1902 37 20.20 95 9 5 1.05 52 1865 39 19.59 96 4 3 0.75								
45 2033 30 24.10 89 85 20 2.01 46 2063 30 23.44 90 65 16 2.65 47 2033 31 22.78 91 49 13 2.36 48 2002 32 22.12 92 36 11 2.03 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 51 1902 37 20.20 95 9 5 1.05 52 1865 39 19.59 96 4 3 0.75					88			
46 2063 30 23.44 90 65 16 2.65 47 2033 31 22.78 91 49 13 2.36 48 2002 32 22.12 92 36 11 2.03 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 51 1902 37 20.20 95 9 5 1.05 52 1865 39 19.59 96 4 3 0.75						85		
47 2033 31 22.78 91 49 13 2.30 48 2022 32 22.12 92 36 11 2.03 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 51 1902 37 20.20 95 9 5 1.05 52 1865 39 19.59 96 4 3 0.75						65		
48 2002 32 22.12 92 36 11 2.03 49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 51 1902 37 20.20 95 9 5 1.05 52 1865 39 19.59 96 4 3 0.75					91	49		
49 1970 33 21.47 93 25 9 1.70 50 1937 35 20.83 94 16 7 1.31 51 1902 37 20.20 95 9 5 1.05 52 1865 39 19.59 96 4 3 0.75	48		32					
51 1902 37 20.20 95 9 5 1.05 52 1865 39 19.59 96 4 3 0.75	49						9	
51 1902 37 52 1865 39 19.59 96 4 3 0.75	50						-	
52 1805 39 19.39 90 1								
33 1020 41 19.00								
	53	1020	4.	19.00	11 77	1		

VIII. COMBINED EXPERIENCE TABLE (Jenkin Jones).

Age.	Living.	Dying.	Expectation.	Age.	Living.	Dying,	Expectation.
10	100000	676	48,36	55	63469	1375	16.86
11	99324	674	47.68	56	62094	1436	16.22
12	98650	672	47.01	57	60658	1497	15.59
13	97978	671	46.33	58	59161	1561	14.97
14	97307	671	45.64	59	57600	1627	14.37
15	96636	671	44.96	60	55973	1698	13.77
16	95965	672	44.27	61	54275	1770	13.18
17	95293	673	43.58	62	52505	1844	12.61
18	94620	675	42.88	63	50661	1917	12.05
19	93945	677	42.19	64	48744	1990	11.51
20	93268	680	41.49	65	46754	2061	10.97
21	92588	683	40.79	66	44693	2128	10.46
22	91905	686	40.09	67	42565	2191	9.96
23	91219	690	39.39	68	40374	2246	9.47
24	90529	694	18.68	69	38128	2291	
25	89835	698	37.98	70	35837	2327	9.00 8.54
26	89137	703	37.27	71	33510	2351	8.10
27	88434	708	36.56	72	31159	2362	7,67
28	87726	714	35.86	73	28797	2358	7.26
29	87012	720	35.15	74	26439	2339	6.86
30	86292	727	34 - 43	75	24100	2303	6.48
31	85565	734	33.72	76	21797	2249	6,11
32	84831	742	33.01		19548	2179	5.76
33	84089	750	32.30	77 78	17369	2002	5.42
34	83339	758	31.58	79	15277	1987	5.00
35	82581	767	30.87	80	13290	1866	4.78
36	81814	776	30.15	81	11424	1730	4.48
37	81038	785	29.44	82	9694	1582	4.18
38	80253	795	28.72	83	8112	1427	3.90
39	79458	805	28.00	84	6685	1268	3.63
40	78653	815	27.28	85	5417	IIII	3.36
41	77838	826	26.56	86	4306	958	3.10
42	77012	839	25.84	87	3348	811	2.84
43	76173	857	25.12	88	2537	673	2.59
44	75316	881	24.40	89	1864	545	2.35
45	74435	909	23.69	90	1319	427	2.11
46	73526	944	22.97	91	892	322	1.89
47	72582	981	22.27	92	570	231	1.67
48	71601	1021	21.56	93	339	155	1.47
49	70580	1063	20.87	94	184	95	1.28
50	69517	1108	20.18	95	89	52	1.12
51	68409	1156	19.50	96	37	2.4	0.99
52	67253	1207	18.82	97	13	9	0.89
53	66046	1261	18.16	98	4	3	0.75
54	64785	1316	17.50	99	1	I	0.50

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IX. BELGIAN TABLE (Adolphe Quetelet).

						D!	Expectation.
Age.	Living.	Dying.	Expectation.	Age.	Living.	Dying.	Expectation.
0	1000	149	38.18	50	409	8	19.59
1	851	149 56	43.78	51	401	8	18.97
2	795 764	31	45.82 46.64	52 53	393 385	8	17.70
. š	745	15	46.85	54	377	8	17.06
5	730	10	46.77	5.5	369	8	16.42
3 4 5 6 7 8	720	9 8 6	46.44 46.02	56	361 353	8 8 8	15.77
7	711	6	45.51	57 58	345	8	14.45
9	697	6	44.93	59	337	9	13.80
	691	5	44.28	60 61	328	10	13.16
11	686 682	4	43.60 42.95	62	307	12	11.97
13	679	5 4 3 3 3	42.04	63	295	12	11.43
14	676	3	41.22	64	283	13	10.92
16	673	3	40.40 39.58	65 66	270 257	13	9.93
17	666	4 5	38.81	67 68	243	14	9.47
18	661	8	38.10		229	14	9.04
19	653	8	37.57	69	215	15	8.60 7.91
20 21	645	0	37.06 36.51	71	185	15	7.83
22	637 628	8	36.01	72	170	16	7.57
23	620	8	35.49	73	139	15	7.18 6.89
24 25	612	7	34.92 34.32	74 75	124	13	6.69
26	598	7	33.72	75 76	111	12	6.42
27	591	7	33.11	77 78	99 88	11	6.14 5.86
28 29	584 578	0	32.50	78	78	10	5.54
30	571	7	31.24	79 80	78 68		5.29
3 1	564	8	30.62	81 82	59	9 8 8	5.01
32	556 548	8	29.87	83	51 43	7	4.72 4.51
33 34	540	8	28.91	84	36	7 6	4.22
35	532	8	28.34	85 86	30	5	3.97
36	524	8	27.74 27.19	87	25	3	3.74
37 38	516	3 4 5 8 8 8 8 8 8 8 7 7 7 7 7 6 7 7 7 8 8 8 8	26.60	87 88	16	5 5 4 4 3 3	3.29
39	500	9	26.03	89	12	3.	3.09
40	491	8	25.47	90	9	3	3.11
41 42	483 475	8	24.9T 24.27	91	5	1	2.89
43	467	9 8 8 8 8 8	23.72	93	4	1	2.52
44	459	8	23.13	94	3 2	1 0	2.12 1.90
45 46	451 443		22.53	95 96	2	1	1.71
47	443	9	21.37	97	1	0	1.50
48	425	9 9 8 8	20.79	98	1 0	I	0.08
49_	417	1 8	20.20	99	1 0	1	1

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X. ENGLISH TABLE No. 1 (WILLIAM FARR).

Age. Living. Dying. Expectation. Age. Living. Dying. Expectation.								
1	Age.	Living.	Dying.	Expectation.	Age.	Living.	Dying.	Expectation.
50 4662 75 20.58 101 0	1	8536 8010 7739 7553 7420 7315 7232 7164 7108 6985 6950 6862 6813 6762 6710 6658 6655 6497 6497 6497 6497 6497 6213 6094 6094 6094 6094 6094 6094 6094 6094	526 271 185 133 104 83 67 56 49 50 60 61 62 63 64 66 66 66 66 66 66 66 66 66	47.17 49.17 49.17 49.17 49.92 50.00 49.75 48.75 48.75 48.75 48.75 46.00 45.17 44.67 45.65 43.00 40.34 30.67 30.00 38.34 31.67 35.00 38.34 33.67 37.00 38.34 33.67 37.00 38.34 33.67 37.00 38.34 33.67 37.00 38.34 39.67 37.00 38.34 39.67 37.00 38.34 39.67 37.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 38.34 39.67 39.00 39.88 39.89	52 53 54 55 57 59 60 62 64 66 66 66 67 71 72 73 74 77 77 77 77 77 77 77 80 81 82 83 84 85 86 87 87 88 88 89 99 99 99 99 99 99 99	4511 44314 4358 4279 4194 4103 4007 3909 3687 35687 35687 35687 35687 35687 3687 3687 3799 2606 2453 2297 2453 2297 2139 11981 1823 1666 1511 2066 588 490 402 402 403 404 405 406 407 407 407 407 407 407 407 407	76 78 84 90 101 106 112 117 123 138 138 144 147 153 156 154 151 140 134 126 177 188 87 77 67 57 67 67 67 67 67 67 67 67 67 67 67 67 67	19.17 18.50 17.83 17.17 16.50 15.83 15.17 14.58 14.00 13.42 12.83 11.75 10.67 9.25 8.34 7.50 8.34 7.50 8.34 7.50 6.42 6.00 5.67 5.34 6.25 4.26 6.26 6.26 6.27
	_50	4002	/5	20.50	101	0		

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XI. ENGLISH TABLE No. 2 (WILLIAM FARR).

Age.	Living.	Dying.	Expectation.	Age.	Living.	Dying.	Expectation
0	5126235	817331	40.36	55	2147180	47003	16.66
1	4308904	281493	46.95	55 56	2100177	48530	16.02
2	4027411	145352	49.20	57	2051647	51921	15.39
3	3882059	95786	50.03	58	1999726	55033	14.77
4	3786273	69451	50.28	59 60	1944693	57914	14.18
5	3716822	50073	50.21	61	1886779	63119	13.60
0	3566749 3630096	36653 31331	49.89	52	1753061	65497	13.03
7 8	3598765	26047	48.81	63	1697564	67744	11.94
9	3572718	22976	48.16	64	1629820	69861	11.42
10	3549742	19260	47.47	65	1559959	71841	10.90
11	3530482	16926	46.73	66	1488118	73663	10.41
12	3513556	16668	45.95	67	1414455	75302	9.92
I 3	3496888	16496	45.17	68	1339153	76718	9.45
14	3480392	19061	44.38	69	1262435	77871	9.00
15	3461331	17203	43.62	70	1184564	78709	8.55
16	3444128	19532	42.84	71	1105855	79182	8.13
17 18	3424596	22674 25802	42.08	72 73	1026673	79234 78817	7.72
19	3401922 3376120	26861	41.35 40.67	74	947439 868622	77884	7.32 6.94
20	3349259	27125	39.99	75	790738	76400	6.57
21	3322134	27380	39.31	76	714338	74342	6.22
2.2	3294754	27629	38.63	77	639996	71704	5.89
23	3267125	27879	37.96	77 78	558292	68499	5.57
2.4	3239246	28128	37.28	79 80	499793	64759	5.26
25	3211118	28383	36.60		435034	60540	4.97
26	3182735	28647	35.92	81	374494	55914	4.70
27	3154088	28924	35.24	82	318580	50979	4.44
28	3125164	29215 29525	34·57 33.89	83 84	267601	45839 40614	4.19
29 30	3095949 3066424	29856	33.21	85	181148	35425	3.96 3.74
31	3036568	30208	32.53	86	145723	30387	3 - 7 + 3 - 53
32	3006360	30585	31.85	87	115336	25611	3.33
33	2975775	30000	31.17	88	89725	21186	3.14
34	2944785	31420	30.50	89	68539	17184	2.97
35 35	2913365	31886	29.82	90	51355	13652	2.80
35	2881479	32379	29.15	91	37703	10011	2.65
37 33	2849100	32905	28.47	92	27092	8060	2.50
	2816195	33464	27.80	93	19032	5977	2.36
3)	2782731 2748678	34053 34678	27.13 26.46	94	13055 8734	4321 3043	2.23
40 41	2714000	35334	25.79	95 96	5691	2083	2.11
4.2	2678666	36024	25.12	97	3608	1385	1.89
4.3	2642642	36743	24.46	98	2222	894	1.79
44	2605899	37495	23.79	99	1328	559	1.60
4.5	2568404	38272	23.13	100	769	338	
45 46	1530132	39077	22.48	IOI	431	198	
47 48	2491055	39908	21,82	102	233	111	
48	2451147	40759	21.17	103	122	61	
49	2410388	41629	20.52	104	61	31	
50	2368759	42514	19.87	105	30	16	
51 52	2326245	43412 44315	19.22	100	14	3	
53	2238518	45219	17.94	108	3	3 2	
54	2193299	45119	17.30	100	1 3	ī	

XII. FARR'S ENGLISH TABLE No. 3.—Males.*

Age.	Living.	Dying.	Expectation.	Age.	Living.	Dying.	Expectation.
							-6
0	511745	83719	39.91 46.65	55 56	209539	5144	16.45 15.86
I 2	428026	2752I 142I5	48.83	57	199114	5428	15.26
3	386290	9213	49.61	58	193686	5584	14.68
4	377077	6719	49.81	59 60	188102	5752	14.10
5	370358	5033 3953	49.71 49.39	61	176421	5929	12.96
	363325	3310	48.92	62	170303	6314	12.41
7 8	358062	2734	48.37	63	163989	6515	11.87
9	355328	2297	47.74	64	157474	6720	11.34
10	553031 351048	1983	47.05 46.31	66	143833	7115	10.32
12	349272	1666	45.54	67	136718	7297	9.83
13	347606	1637	44.76	68	129421	7458	8.36 8.90
14	345969	1679	43.97 43.18	69	114370	7593 7695	8.45
15 16	344290	1928	42.40	71	106675	7756	8.03
17	340581	2112	41.64	72	98919	7770	7.62
18	338469	2320	40.90	73	91149 83416	7733 7639	7.22 6.85
19	336149	2541	40.17 39.48	74 75	75777	7483	6.49
20 21	333608 330844	2764	38.80	76	68294	7268	6.15
22	328043	2836	38.13	77	61026	6990	5.82
23	325207	2868	37.46 36.79	78	54036 47381	6655	5.51
24	322339	2897 2926	36.12	79 80	41115	5832	4.93
25 26	316516	2954	35.44	81	35283	5361	4.66
27	313562	2981	34.77	82	29922	4862 4349	4.41
28	310581	3000	34.10	83 84	20711	3834	3.95
29 30	307572	3038	32.76	85	16877	3328	3.73
31	301466	3100	32.09	86	13549	2840	3.53
32	298366	3134	31.42	87 88	10709 8325	2384	3.34
33	295232	3171	30.74	89	6360	1590	3.00
34 35	288850	3254	29.40	90	4770	1260	2.84
36	285596	3300	28.73	91	3510	979	2.69
37	282296	3352	28.06	92	1787	744 553	2.41
38 39	278944	3406 3465	27.39 26.72	94	1234	401	2.29
40	272073	3529	26.06	95	833	285	2.17
41	268544	3596	25.39	96	548 352	196	1.95
42	264948	3668 3746	54.73 24.07	98	220	86	1.85
43 44	257534	3826	23.41	99	134	55	1.76
45	253708	3912	22.76	100	79 46	33	1.68
46	249796	4001	22.11	101	25	II	
47 48	245795	4192	20.82	103	14	7	
49	237508	4292	20.17	104	7	3	
50	233216	4395	19.54	105	4 2	2 I	
51	228821	4626 4758	18.90	107	ī	1	
52 53	219437	4885	17.67	108	0	0	
54	214552	5013	17.06	109			
,	1	}		11	1	1	

^{*}Dr. Farr's English Life, Males, No. 3, has recently been adopted by the Legislature of New York as the basis of annual valuations of life policies by the New York Insurance Department—interest assumed at 5 per cent.

TABLE OF HEIGHT AND WEIGHT.*

The following table shows what the best authorities regard as the most desirable Proportion of the Height of Individuals to their Weight.

Ft. In. Lbs. 5
O W W W W W W W W W W W

^{*} Compiled by Minturn Post, M. D., and Isaac L. Kip, M. D., Medical Examiners to the Mutual Life Insurance Company of the English standards. It is substantially the same as those adopted by most of the American companies. Of course it is not expected New York, from observations upon the proper proportions of height and weight among American lives. This differs slightly from that this proportion be adhered to in taking risks. It is only considered as the most desirable proportion.

EXPECTATION. FOR RULE SHORT

It may be convenient to know the expectation of life when one cannot have access to the tables. Either of the following simple rules, though only an approximate estimate, will give a result sufficiently accurate for ordinary purposes:

From 14 to 25 inclusive deduct the age from 100; half the balance is the Expectation. 33 " " " " " " 33 ,, " " 26 " 30 41 " 50 31 " 40 51 " 60 2,9 23 "

Or deduct the age of the party, whatever it may be, from 80, and two-thirds of the difference is the Expectation.

DISCOUNT TABLE.*

Present Value of One Dollar, due at the end of any number of Years not exceeding 100.

-							
End of Year.	4 per Cent.	5 per Cent.	6 per Cent.	End of Year.	4 per Cent.	5 per Cent.	6 per Cent.
ī	.961538	.952381	.943396	51	.135301	.083051	.051215
2	.924556	.907029	.889995	52	.130097	.079096	.048316
3	.888996	.853838	.839619	53	.125093	.075330	.045582
4 5	.821927	.783526	.747258	54	.115656	.068326	.040567
6	1 .	746215		56	.111207		
	.790315	.710681	.704961		,111207 ,100930	.065073	.038271
7 8	.730690	.676839	.627412	57 58	.102817	.059023	.034061
9	.702587	,644609	. 591898	59	.098863	.056212	.032133
NO	.675564	.613913	. 588395	60	.095060	.053536	.030314
41	.649581	. 584679	. 526788	61	.091404	.050986	.028598
12	.624597	.556837	.496969	62	.087889	.048558	.026980
13	.600574	.530321	.468839	63	.084508	.046246	.025453
14	-577475	.505068	.442301	64	.081258	.044044	.024012
15	.555265	.481017	.417265	65	.078133	.041946	.022653
16	,533908	.458112	.393646	66	.075128	.039949	.021370
17	.513373	.436297	.371364	67	.072238	.038047	.020161
18	.493628	.415521	.350344	68	.069460	.036235	.019020
19	.474642	-395734	.330513	69	.066788	.034509	.018943
20	.456387	.376889	.311805	70	.064219	.032866	,016927
21	.438834	.358942	.294155	71	.061749	.031301	.015969
22	.421955	.341850	.277505	72	.059374	.029811	.015065
23	.405726	. 325571	.261797	73	.057091	.028391	.014213
24	,390121	.310068	.246979	74	.054895	.027039	.013408
25	.375117	.295393	.232999	75	.052784	.025752	
26	.365689	.281241	.219810	76	.050754	.024525	.011933
27 28	. 346817	.267848	. 207368	77 78	.048801	.023353	.011258
29	.333477	.255094	.195630	79	.046924	.022245	.010010
30	.308319	.231377	.174110	80	.043384	.020177	.009452
-	1			81		.019216	.008917
31 32	.296460	,220359	.164255	82	.041716	.019210	.008412
33	.274094	.199873	146186	83	.038569	.017430	.007936
34	.263552	.190355	.137912	84	.037085	.016600	.007487
35	.253415	.181290	. 130105	85	.035659	.015809	.007063
36	. 243669	.172657	, 122741	86	.034287	.015056	.006663
37	.234297	.164436	.115793	87	.032969	.014339	.006286
38	. 225285	.156605	.109239	88	.031701	.013657	.005930
39	,216621	.149148	. 103056	89	.030481	.013006	.005595
40	.208289	.142046	.097222	90	,029309	.012387	.005278
41	,200278	.135282	.091719	91	.028182	.011797	.004979
42	.192575	, 128840	.086527	92	,027098	,011235	.004697
43	.185168	.122704	.081630	93	,026056	.010700	.004432
44	.178046	.116861	.077009	94	.025053	.000705	.004181
45	1 1 1	.111297	.072650	95	.024090	, , ,	.,
46	.164614	.105997	.068538	96	.023163	.009243	,003721
47	.158283	.100949	,064558	97	.022272	.008803	,003510
48 49	.152195	.096142 .091564	.057546	98 99	.021416	.008384	,003312
50	.140341	.087204	.05/340	100	.019800	.007604	.003124
, -	-1-1-3	, , , , ,				, , ,	/

^{*} This Table shows the present value of future payments of One Dollar for any number of years to 100, and will prove useful both to the student of the science and to the solicitor.

COMPARATIVE MORTALITY TABLE—I.

Showing how many Persons will survive each Year out of the number starting in the Year of life indicated by the several Tables.

Age. Dr. Farr's English Life. Male No.3. Actuaries. Experience of Mut. Life. Male No.3. Actuaries. Experience Mut. Life. Male No.3.
0 511,745 1 428,026 55 209,539 63,469 65,208 2 400,505 57 199,114 60,658 62,094 64,122 3 386,290 58 193,686 59,161 61,866 4 377,977 59 188,102 57,600 65,525 5 370,358 60 176,421 54,275 57,843 7 361,372 62 170,303 52,505 56,843 9 355,128 63 163,089 50,661 54,788 10 333,031 100,000 100,000 65 150,754 40,754 51,381 11 351,048 99,324 99,259 66 143,833 44,693 49,453 12 349,372 98,550 98,520 67 136,718 42,565 47,475 13 347,606 97,978 97,782 68 129,421 40,374 45,393 14 345,969

^{*} This does not by any means give the exact mortality experienced by the Mutual Life Insurance Company.

COMPARATIVE MORTALITY TABLE—II.*

Showing the number expected to die out of 1,000 persons entering each year, according to three English and one American Experience Tables; also, in the fifth column, the number actually dying, as proven by the Massachusetts Commissioners' observations among insured lives during seven years—1850 to 1860.

	1	1		1	
Age.	English Life. No. 3.	Carlisle.	Actuaries.	Mutual Life. General Experience.	Massachusetts Experience. 7 years.
25 26 27 28 30 31 32 33 34 35 37 38 39 40 41 42 43 44 45 46 47 48 49 51 55 55 56 66 67 66 67 69 69 69 69 69 69 69 69 69 69 69 69 69	9, 20 9, 38 9, 55 9, 74 9, 93 10, 13 10, 56 11, 05 11, 33 11, 62 11, 94 12, 65 13, 48 13, 94 14, 44 14, 97 15, 54 16, 15 16, 18 17, 49 18, 23 19, 42 20, 42 21, 45 22, 45 24, 85 26, 17 27, 63 29, 25 31, 05 31,	7.31 7.36 7.76 8.69 9.82 10.10 10.25 10.13 10.05 10.15 10.25 10.85 11.16 11.87 13.07 14.58 14.79 14.58 14.79 14.80 14.81 14.60 13.93 13.68 14.29 15.20 16.14 16.89 17.92 19.00 28.27 33.48 35.78 37.40 38.25 39.77 41.08 44.38 46.45 49.10 51.64	7.77 7.88 8.00 8.13 8.27 8.42 8.57 8.74 8.91 9.09 9.28 9.48 9.48 9.90 10.61 10.89 11.25 11.69 12.21 12.83 13.51 14.25 15.06 15.93 16.89 17.94 19.09 20.31 21.66 23.12 24.67 26.37 26.37 27.83 28.44 29.48 20.31 21.66 23.12 24.67 26.37 26.37 26.37 27.83 28.44 29.48 29.48 20.31 21.66 23.12 24.67 26.37 26.37 26.37 26.37 27.61	8.26 8.33 8.41 8.49 8.57 8.66 8.74 8.82 8.99 9.07 9.15 9.21 9.27 9.31 9.32 9.34 9.38 9.49 9.72 10.10 10.66 11.33 12.05 12.77 13.15 13.83 15.83 16.66 17.64 18.81 20.17 21.75 23.61 25.68 23.61 25.68 25.69 26.00 27.50 26.00 27.50 27.70	7.01 6.69 6.59 6.74 6.80 7.42 8.01 6.76 6.50 8.14 7.43 6.56 8.12 8.51 8.68 7.83 8.40 9.49 8.53 9.74 9.19 10.28 9.57 10.14 10.63 13.13 14.34 12.07 13.30 16.46 17.04 19.77 20.95 20.795 20.795 22.7.48 25.555 35.13 30.07 40.15 42.65

^{*} As it will be interesting and instructive still farther to show the results of observations upon AMERICAN lives, in comparison with other calculations made in England, we append two other Comparative Mortality Tables.

COMPARATIVE MORTALITY TABLE—III.

Showing the number of deaths in the year following each year of age from twenty-five to seventy inclusive, out of one thousand persons living at each of such ages, according to the experience of the three several Tables of mortality known as the Carlisle, the Actuaries' or Combined Experience, and the English Life, compared with Mutual Benefit Tables.

1 a	Dies.				
Forsons Livin,	AGE.	Deaths in next y'r Mutual Benefit,	Deaths in next year Carlisle.	Deaths in next year Actuaries'.	Deaths in next yes English Life.
1000	25	4.04			
1000	26	4.24	7.31	7.77	9.20
1000	27	10.29	7.36	7.88	9.38
1000	28	9.91	7.76	8.00	9.55
1000	29	8.42	8,69	8.13	9.74
1000	30	8.32	9.82	8.27	9.93
	31	6.98	10,10	8.42	10.13
1000	32	8.28	10.20	8.57	10.34
1000	33	9.80	10.13	8.74	10.56
1000	34	8.18	10.05	8.91	10.80
1000	35	9.71	10.15	9.09	11.05
1000	36	7.52	10.25	9.28	11.33
1000	37	8.69	10.55	9.48	11.62
1000	38	2.74	10.85	9.68	11.94
1000	39	8.91	11.16	9.90	12.29
1000	40	10,21	11.87	10.13	12.65
1000	41	7.58	13.05	10.36	13.06
1000	42	12.01	13.77	10,61	13.48
1000		8.24	14.37	10.89	13.94
1000	43	12.03	14.58	11.25	14.44
1000	44	11.38	14.79	11,69	14.97
1000	45	10.11	14.80	12.21	15.54
1000	46	8.33	14.81	12.83	16.15
1000	47	12.63	14.60	13.51	16.80
1000	48	12.60	13.93	14.25	17.49
1000	49	11.13	13.68	15.06	18.23
1000	50	16.30	13.41	15.93	19.02
1000	51	14.09	14.29	16.89	20.42
1000	52	11.25	15.20	17.94	21.45
1000	53	19.50	16.14	19.09	22.51
1000	54	15.27	16.89	20.31	23.64
1.000	55	12.95	17.92	21.66	24.85
1000	56	20.69	19.00	23.12	26.17
1000	57	21.76	20.89	24.67	27.63
IOOO	58	19.58	24.20	26.38	29.25
1000	59	21,13	28.27	28.24	31.05
1000	60	26.67	33.48	30.33	33.05
1000	61	28.24	35.78	32.61	35.29
1000	62	26.03	37.40	35.12	37.77
1000	63	17.76	38.25	37.83	40.53
1000	64	17.59	39.77	40.82	43.60
1000	65	16.55	41.08	44.08	46.98
1000	66	40.98	42.50	47.61	50.71
1000	67	34.31	44.38	51.47	54.83
1000	68	53.89	46.45	55.63	59.33
1000	69	23.08	49.10	60.08	64.25
1000	70	26.78	51.64	64.93	60.62

ORIGIN AND BUSINESS OF COMPANIES,

IN NEW POLICIES, (1st line) TOTAL INCOME, (2d line) AND TOTAL ASSETS, (3d line) COMPILED FROM ORIGINAL SOURCES EXPRESSLY FOR THIS WORK,

FROM 1843 TO 1866.

	1843.	1844.	1845.	1846.	1847.	1848.
Mutual of New York	476	476 616	1,047	1,085 \$322,557 87	1,466 + \$812,230 80 + \$550,298 56	\$333,912 04 \$758,473 14
New England Mutual		\$25,697 00 \$18,626 00	49,112 00 63,369 00	435 72,209 00 104,313 00	461 94,147 ∞ 170,339 ∞	413 106,936 ∞ 223,995 ∞
Mutual Benefit		869	693	2,316 264,661 31 198,724 51	1,847 308,923 71 444,314 82	1,406 345,810 51 673,362 96
New York Life,			22,688 64	632 48,012 05	7967 73,626 93	1,821 149,624 26 114,437 58
State Mutual			530 16,703 26 \$ 66,703 26	439 30,653 67 97,356 93	538 49,220 50 146,577 43	39,244 16 176,853 59
Connecticut Mutual					892 58,416 00 92,612 00	2,751 187,142 00 184,959 00

	1849.	1850.	1851.	1852.	1853.	1854.
Union Mutual	Organized,	\$182,895 23	\$173,169 09	\$177,310 39	\$182,758 81	\$169,903 11
United States		408 31,651 00 117,980 00	539 51,417 00 142,551 00	1,161 90,457 00 178,063 00	575 100,802 00 206,211 00	103,424 00 238,684 00
Manhattan		Organized.	953 71,515 17 140,773 97	97,922 48 196,863 51	98,149 48 246,532 13	611 148,332 38 319,721 93
National, Vermont		384 14,216 41 8,645 62	281 20,080 61 16,177 17	24,813 12 28,087 75	31,999 75 44,741 54	180 32,558 28 62,027 84
Charter Oak		Organized		54,750 29	59,986 33	95,292 51
Ætna		Organized.				
Phoenix Mutual			Organized.	335	23,723 43	923 34,676 41
Berkshire			Organized.	4,312 31	192 10,200 36	455

ORIGIN AND BUSINESS OF COMPANIES—CONTINUED.

					The state of the s	
	1819.	1850.	1851.	1852.	1853.	1854.
Massachusetts Mutual			Organized.	\$11,532 22 *\$105,031 45	\$12,696 06 \$108,397 20	\$17,326 37 \$116,704 79
Knickerbocker					393 †23,839 16 127,152 10	276 39,104 84 14,070 74
Mutual of New York	\$471,189 39 \$1,000,439 62	\$530,906 38 \$1,280,088 46	\$544,601 16 \$1,592,655 56	1,060 688,123 46 2,018,775 61	1,260 776,227 61 2,444,684 81	1,568 780,798 71 2,734,485 31
New England Mutual	130,220 00	335 145,668 00 344,611 00	343 146,197 00 433,416 00	488 167,992 00 539,301 00	502 190,812 00 ‡649,380 00	453 220,780 00 629,827 00
Mutual Benefit	1,509 498,018 21 935,944 96	747 538,361 55 1,192,441 66	499 526,679 50 1,381,008 64	496 551,839 40 1,559,092 12	\$74,277 40 1,774,005 46	463 597,144 27 2,033,859 47
New York Life,	1,069 129,821 36 164,368 88	1,755 275,809 47 320,581 27	1,329 321,782 72 354,755 24	1,260 356,242 47 456,751 00	639 384,558 40 636,678 92	485 367,357 65 814,044 95
State Mutual	315 60,572 17 194,426 91	189 51,275 51 212,863 92	60,573 17 186,148 29	361 59,828 00 197,503 88	69,064 96 228,982 91	141 50,272 44 250,631 31
Connectic t Mutual	4,243 422,225 00 469,803 00	5,589 693,905 00 918,406 00	2,699 742,816 00 1,351,036 00	1,320 741,172 00 1,701,673 00	935 737,178 00 1,980,170 00	939 769,068 00 2,154,489 00

	1855.	1856.	1857.	185S.	1859.	1860,
Mutual of New York	\$880,916 35 \$3,178,034 28	\$1,045,235 17	\$1,166,732 97 \$4,488,043 99	\$1,305,604 70 \$5,188,933 42	\$1,445,951 97	\$1,539,575 75
New England Mutual	516 249,104 00 768,984 00	299,390 00 964,418 00	330,568 ∞ 1,144,856 ∞	\$26 417,844 00 \$1,395,622 00	1,007 467,508 00 1,342,856 00	
Mutual Benefit	626,315 2,230,005 47	645,366 27 2,484,512 18	587 695,017 99 2,743,325 73	913 759,853 36 3,001,920 91	876,817 53 3,400,582 39	1,435 977,007 74 3,812,558 50
New York Life	474 378,186 14 902,062 70	706 408,223 27 1,509,008 65	711 474,191 32 1,191,545 59	626 495,761 20 1,402,966 25	887 564,384 22 1,595,901 56	1,024 608,639 45 1,767,133 24
State Mutual	62,985 o5 280,760 33	63,786 70 320,867 40	256 69,877 393,573 59	69,009 21 437,580 67	75,381 61 477,619 29	84,008 21 529,735 63
Connecticut Mutual	766,963 00 2,271,837 00	776,418 00 2,473,037 00	\$65 802,804 00 2,706,765 00	930 853,665 00 3,000,523 00	946,822 00 3,370,001 00	1,725 1,077,138 00 3,889,411 00
Union Mutual	376 150,118 87	139,517 57	236 ISI,756 33	363	526 165,170 73	178,248 12
These include the Capital (guarantee) of \$100,000.	l (guarantee) of ŝ	i po	nly the net inco	1 Only the net income is given in years up to 1889, 183, 58, '63, and '66.	-	

ORIGIN AND BUSINESS OF COMPANIES—CONTINUED.

	1855.	1856.	1857.	1858.	1859.	1860.
United States	\$04 \$123,835 00 \$283,131 00	\$150,926 00 \$341,324 00	\$184,899 oc \$420,483 oo	\$196,221 00 \$497,290 00	\$08 \$ 207,006 00 \$ 576,664 00	\$241,274 00
Manhattan	454 194,030 80 380,566 67	682 229,531 83 498,534 96	750 317,105 88 606,509 27	324,811 76 708,684 76	351,701 78 871,008 07	949 472,368 62 1,039,820 96
National, Vermont	32,867 29 75,156 58	326 43,237 30 100,032 14	299 50,393 14 122,915 27	54,532 92 155,994 20	255 61,772 90 195,758 57	281 77,395 18 228,164 76
Charter Oak	127,277 00	136,197 99	139,866 24	205,810 92	260,157 21	277,166 12
Ætna						
Phœnix Mutual	631 44,160 28	50,373 96	829 58,815 48	490 59,332 60	58,946 12	57,999 21
Berkshire	33,740 91	43,083 77	50,456 15	148	54,373 67	65,756 30
Massachusetts Mutual	339 29,683 OI 126,233 85	43,802 91	388 56,446 43 184,202 10	384 71,570 55 220,060 31	822 114,828 87 271,298 12	890 152,280 97 343,313 42

	609 76,070 00 162,618 00	383 31,590 10 142,516 42	328 28,298 60 141,279 58	†447 39,545 00 157,878 co	9,757 22 194,545 47
Organized.	*277 26,444 00 120,772 00	13,736 08 137,115 71			
~~	-			~~	
hwestern	itable	rdianrdian	shington	ne	Germania
	Organized,	Organized	Organized Organized	Organized Organized	Organized,

* Five months. † Eight months.

ORIGIN AND BUSINESS OF COMPANIES—CONTINUED.

	1861.	1862.	1863.	1864.	1865.	1866.
Mutual of New York	\$1,593,732 14	\$1,755,285 51	\$2,091,301 62 \$10,029,264 81	\$1,755,285 51 \$2.091,301 62 \$2,849,866 50 \$3,853,665 80 \$6,217,035 88 \$8,018,107 95 \$10,020,264 81 \$11,790,414 68 \$14,112,249 85 \$77,639,296 97	\$3,853,065 80 \$14,112,249 85	\$6,217,035 88 \$17,639,296 97
New England Mutual	1,000 634,707 00 2,043,904 00	1,364 737,363 © 2,372,946 ©	814,222 00 * 2,798,239 00	1,750 1,102 316 00 2,651,116 00	2,399 1,318,271 00 3,362,986 80	* 1,873,406,00 * 4,508,876 00
Mutual Benefit	894 950,638 20 4,109,353 45	1,104,955 59 4,439,231 77	3,511 1,528,791 44 5,285,736 00	7,092 2,486,706 56 6,774,867 60	6,819 3,502,839 00 9,049,539 60	7,193 4,034,355 39 11,627,984 73
New York Life	1,201 612,549 80 2,004,857 53	3,302 894,280 99 2,586,246 07	4,675 1,162,191 19 2,705,666 74	4,905 1,729,811 17 3,741,078 48	2,342,065 40 5,018,449 06	7,296 3,088,804 47 7,009,092 25
State Mutual	87,928 82 571,038 20	91,602 64 593,797 17	105,668 64 639,525 08	304 130,035 13 711,472 29	304 . 129,436 58 . 669,399 08 .	
Connecticut Mutual	1,115,500 00 4,358,009 00	2,285 1,345,477 °° 5,008,849 °°	5,672 1,809,713 00 6,030,544 00	2,938,562 ∞ 7,918,896 ∞	PH	10,063 4,174,245 00 † 5,339,535 00 10,104,209 00 ‡ 13,316,275 00
Union Mutual	436 179,827 46	334 180,840 14	1,030 246,319 18 852,088 41	1,834 398,720 61 1,094,609 43	2,593 394,042 81 1,530,877 17	3,228 1,077,833 00 2,188,429 20
United States,	710 237,754 00 804,852 00	257,079 00 876,067 00.	1,085 314,470 00 1,052,011 00	1,315 424,682 °C 1,304,828 °C	540,578 00 1,600,139 00	1,958 00 000,117 00 2,005,702 00

Including surplus distributed in 1853, '58, '63, and '66. † For eleven months only, to 31st December. ‡ December 31.

ORIGIN AND BUSINESS OF COMPANIES—CONTINUED.

	1861.	1862.	1863.	.t9SI	1865.	1866.
Equitable	\$103,429 00 \$210,636 00	\$181,378 00 \$332,298 00	\$308,060 00 \$584,714 00	\$579,079 00 \$1,017,977 00	\$,268 \$971,505 00 \$1,648,486 00	\$2,069,070 00 \$3,077,788 00
Guardian	257 41,322 05 163,151 90	61,821 35 184,234 63	1,048 117.291 39 210,266 44	1,900 265,532 62 335,817 17	2,804 413,305 53 513,818 13	2,192 582,610 37 737,413 66
Washington	45,543 89 156,299 85	362 71,493 93 200,722 55	512 101,456 15 267,462 79	919 187,718 07 369,567 51	1,306 260,646 93 530,097 36	1,838 359,528 63 727,129 99
Home	903 88,200 00 199,478 00	137,236 00 277,305 00	259,609 00 259,609 00 418,329 00	393,708 00 627,910 00	2,069 493,021 00 890,029 00	798 746,434 [∞] 453,951 [∞]
Germania	39,571 98 202,471 69	58,326 43 260,885 43	2,382 137,134 72 335,342 13	3,071 250,374 08 500,411 49	4,623 442,521 70 800,230 39	5,007 743,746 29 1,240,299 65
Security		23,423 00	80,538 00 160,092 00	1,403 149,411 00 249,831 00	2,134 323,827 00 425,027 00	3,328 603,651 00 757,398 00
Worth America		Organized.	1,040 125,474 07 160,853 12	1,236 229,671 18 285,142 05	2,368 649,579 84 706,742 63	3,790 1,303,566 61 1,539,019 26

8041 \$186.067.00	\$524,506 00	3,051 672,429 07 789,248 62	248,957 00 530,839 00	1,524 195,619 50 490,013 59	706 158,801 63 206,707 47	1,207 260,012 64 404,411 52	1,555 227,816 45 315,904 22	662 65,524 83 543,424 86	#1,705 238,092 00 73,299 00	
1024	\$318,650 42	2,763 417,737 29 469,009 12	1,093 107,138 70 306,814 01	525 61,499 74	96,710 78 182,309 32	817 92,397 13 218,091 18	656 71,694 90 243,360 41	* 5,681 43 † 112,447 56		65. H8 months.
ct9	\$207,515 42	1,039	17,259 19 231,538 76	6,039 99	71	38,156 97 160,738 10				† Commenced business October 1, 1865.
178	\$115,257 54									ommenced busine
Laning	Oigainzeu.									
•										65, to December
5	John Hancock	Globe Mutual	Widows and Orphans'	Continental (Conn.)	National (N. Y.) $\bigg\}$	Brooklyn	Universal	Connecticut General	Continental (N. Y.)	* From October 1, 1865, to December 31, 1866.

ORIGIN AND BUSINESS OF COMPANIES—CONTINUED.

	1861.	1862.	1863.	1864.	1865.	1866.
Great Western						\$89,823 00
American Popular						50,829 00 149,676 00
Atlantic Mutual						905 905 175,779
New York State						752 48,150 72 155,765 15
New Jersey Mutual					Organized,	* 857 * 8,577 92 166,142 95
Provident (Phila.)						† 528 82,531 70 205,528 31

† Incorporated third month 22d, 1865. Commenced business seventh month, 1865. * Total since organization.

NOTES

To the foregoing Records of the Business of Companies.

NOTE 1.-Where the word "organized," in the totals above, does not appear, the organization took place during the year under which the figures first occur. NOTE 2.-From the Impossibility of getting statistics, no companies are embraced in the foregoing which are not doing business in These tables are a study, and, in many respects, are valuable and suggestive. As will be seen, they have cost not a little of labor and New York or Massachusetts. This is the only full tabular statement that has ever been compiled; and, like all the book, it is copyrighted. careful painstaking.



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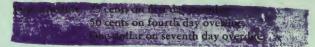






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